THE ROYAL REGIMENT OF ARTILLERY

IN THE BOER WAR

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PREFACE

This study is concerned with the British Army's Royal Regiment of Artillery in the Boer War. Through examination of the Army and the Regiment before, during and after the war, this narrative seeks to demonstrate the conditions of the Regiment before hostilities, its employment during the course of selected engagements and the results that the war generated regarding the Regiment and its future employment.

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CHAPTER I

INTRODUCTION

The outbreak of the Boer War on October 11, 1899, was the culmination of nearly a century of hostility between the Dutch emigrants in South Africa and the British Government, which acquired possessions in South Africa at the end of the Napoleonic War. From the outset neither the British nor the Boers seemed willing to abide each other. In 1835, after the British began enforcing anti-slavery laws in the Cape Colony, the Boers began their "Great Trek," moving north, deeper into the interior to avoid the British Government. Later, following the fourth Kaffir War, the Boers moved even further north, crossing the Vaal River. There in 1852, they established the independent state of Transvaal, and the next year the Orange Free State became the second independent Dutch republic. The discovery of diamonds in 1867, along the Vaal River, ultimately led to British annexation of Transvaal in 1877, and this only added fuel to the smoldering fire. In 1880, some disaffected Boers rose in rebellion against the British rule, and successfully fought the British for almost a year. Finally, in 1881, the Boers defeated the British at Majuba Hill, and the two Dutch republics soon were allowed to become nearly independent of British suzerainty. It appeared for the moment things were going to settle down.

However, the discovery of gold in 1886, and the subsequent growth of the fortune hunting British population searching the gold and dia-

mond fields in Transvaal soon created more difficulty between the Dutch republics and Great Britain. The disgruntled British residents of the Dutch states, known as Uitlanders, sought a greater voice and participation in the governmental affairs of the two republics. The Dutch fearing British domination, were unwilling to concede more than seven years residency before enfranchisement. This concession, however, made no provisions for retroactive residency, and the Uitlanders grew more upset with the Boer government. In 1896, a militant group of Uitlanders attempted to march on Johannesburg. Although easily defeated by the Boers, this incident and the sympathetic expression of the diamond baron, Cecil Rhodes, and the British Colonial Minister, Joseph Chamberlain, was a warning of things to come. Sensing an impending threat, the Dutch governments of Transvaal and the Orange Free State began preparations for possible all out war.

In that year, the Volksraad, the parliamentary body in Transvaal, authorized in two resolutions, £2,350,000 for military expenditures. Of that amount, £850,000 was specifically earmarked for purchase of modern artillery, rifles, ammunition and the construction of fortifications.[1] The next three years were spent preparing the reserves for possible call to arms, and upgrading and training the national police and the Staats Artillery, the only regular military forces available to the Boers.

In April, 1899, the dissatisfied Uitlanders, still pressing for

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[1]Great Britain, Report of His Majesty's Commissioners Appointed to Inquire into the Military Preparations and other Matters Connected with the War in South Africa. (London: His Majesty's Stationery Office, 1903), p. 163. [Hereinafter cited as Great Britain, Report of His Majesty's Commissioners.]

governmental participation, petitioned the Queen to intervene on their behalf to redress enfranchisement, naturalization and dynamite monopoly grievances. This generated the final crisis between the British and Boers. In the negotiations that followed, neither the Dutch Republics nor Great Britain could see eye to eye. By July, the situation was becoming more tense. The small British garrisons in the Cape Colony and in Natal began preparations to defend the two colonies from possible attack by the Dutch republics. Taking up positions along the border, the British South African garrison spread its six battalions of infantry and two regiments of cavalry at strategic points along the boundary. A station was placed at Ladysmith in Natal, near the Transvaal border, to protect the avenue of approach to the port city and railhead at Durban. Two other positions were established in the west along the railroad which ran through Bechuanaland to Cape Town. One was located at Kimberley along the Orange Free State border, and the other was placed further north at Mafeking, near the western border of Transvaal.

The Boers took this action as a threat to their security and negotiations were broken off. They immediately concentrated on putting the two nations on a war footing. The Staats Artillery had already received seventy-one of eighty-three new guns that had been ordered from European gun-makers. To combine with the Staats Artillery in time of war, the Boers had a reserve force which numbered 55,034 personnel available for duty. They were well armed with either

Martin-Henry or Mauser rifles of the newest design.[2]

From the British point of view, information from intelligence sources clearly indicated that the Boers were preparing to defend their nations. There was little doubt that they were fully capable of doing so by offensive action. At least one of these possible offensive thrusts was thought to be planned for Natal, through Van Reenan's Pass in the north to Durban on the coast, with the obvious intermediate objective at Ladysmith.[3] By early September, the British had increased the garrison in Natal and the Cape Colony by the addition of 10,000 men in an effort to militarily "....threaten so long as it was permitted to persuade."[4] As the tensions rose between the Boers and Great Britain, the "threat" was increased until by early October, the British had 24,746 regulars present in Natal and the Cape Colony. On October 7, the War Office ordered mobilization of 47,000 men, both regulars and reservists, with 114 guns for immediate dispatch for Cape Town. General Redevers Buller, a highly respected officer who was familiar with South Africa was designated to command the newly mobilized field force.[5]

On October 9, 1899, the Dutch Republics of Transvaal and the Orange Free State dispatched a joint ultimatum to the British. In it,

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[2]Ibid., p. 158. "Captain Reichman, the American Military Attache with the Boers in his official report dated December, 1900, doubts whether more than 35,000 were ever in the field at any one time." Ibid., p. 157. [The Boer arsenal was reported in possession of 29,000 Martin-Henrys and 34,000 Mausers.]

[3]Ibid., p. 178.

[4]Great Britain, Parliament, Parliamentary Debates (House of Commons), 4th Ser. Vol. LXXVII (17 Oct.-27 Oct., 1899), p. 408.

[5]Ibid., pp. 412-413.

they demanded the withdrawal of British forces along their borders within forty-eight hours or accept a state of war. Two days later a rejection of the ultimatum was received by the Boers and war was on.

So began one of the most difficult and frustrating wars in the annals of British military history, costing millions of pounds and the efforts of more than 400,000 soldiers and sailors before it ended three years later. Depicted as the shame of British imperialism, the war brought forth immediate criticism from the Continent, the United States and within Parliament. However, while criticism from abroad concerning the causes of the war was running rampant in the early months of the conflict, the Boers were severely testing the British Army.

Within a week of the outbreak of hostilities, the British garrisons at Mafeking and Kimberley were encircled and invested. By October 23, the Boers had occupied Dundee and the British withdrew to the Ladysmith garrison. One week later, 850 British troops surrendered to the Boers at Nicholson's Nek, and this event essentially completed the investment of Ladysmith. The next day, October 31, General Buller and the first contingent of his field force arrived at Cape Town, but the Boers had already seized the strategic offensive. The British were reeling on their heels trying to stabilize the situation. Public opinion at home clamored for the relief of Ladysmith, Kimberley and Mafeking, and Buller was tactically limited in his course of action.

Splitting his force into two main columns, Buller dispatched one element toward Ladysmith and the other toward Kimberley. The Boers employing excellent camouflage and precise sharpshooters, coupled with the extreme mobility of their forces took their toll of the British, not only in casualties, but also in confidence, morale and esprit de

corps. Furthermore, the Boer artillery, equipped with the most recent designs in artillery weapons, subjected the British soldier to the first prolonged artillery fire he had faced in forty-five years. It was a new and frightening experience. To add further to the difficulties, the Royal Regiment of Artillery, the most highly prized of British arms, was not performing as well as had been anticipated. On the contrary, the Regiment was being consistently out-ranged and outmaneuvered by the heretofore untested Staats Artillery.

Reversal followed reversal, and on December 15, 1899, the British suffered a smashing defeat at Colenso ending "Black Week," which also saw the defeat of British forces at Magersfontein and Stormberg as well. The British were stalled along the Modder River in the west and the Tugela River in the east. The relief of the besieged garrisons was much in doubt at that moment.

Following closely on the heels of these multiple reverses to the British military prestige was the growth of criticism of the Army's execution of the war. Almost daily from October to December, 1899, the Times published some criticism of the army's performance. With each defeat, the criticism mounted and not the least of it was directed at the Royal Regiment of Artillery. In an effort to stem the tide of criticism and lift the flagging British South African Field Force, the War Office on December 18, appointed Lord Roberts of Kandahar as Commander in Chief with Lord Kitchener of Khartoum as his Chief of Staff. The Boers, however, had already inflicted a severe blow to the prestige of the army and the Royal Regiment, and created a crack in the foundation of the security of the British Empire and the home islands.

It was apparent a unique form of warfare was in the offing in

South Africa. Frankly, the British Army as a whole and the Royal Regiment particularly, had not prepared for war under the conditions that existed in South Africa. At the end of the first three months, in an effort to cope satisfactorily with the new type of warfare they faced, the pragmatic British began modifying and streamlining the Army. By February, 1900, they were on the offensive and by June 5, 1900, they had occupied the Orange Free State and Transvaal's capital, Pretoria. During this period, the Royal Regiment's modifications and jerry-rigged interim adaptations not only proved adequate to the task, but also exemplified the need for modification. Their changes in material and employment made a significant contribution to the reversal of the sobering trends of 1899. After the fall of Pretoria, the Regiment's participation as gunners decreased as the Boers began a guerrilla war. Finally, the Royal Horse and Field Artillery units were formed into mounted infantry units in 1901, and they continued to participate in the war in that manner until the final peace in May, 1902.

This study will examine the conduct of the Royal Regiment of Artillery in the Boer War from October 1899, to September, 1900, with particular attention to its employment and effectiveness. By examining the Regiment prior to the war and in selected major engagements during this period, this study will determine the contributions it made to the British military effort. Finally, this study will illustrate some of the changes in tactical philosophy and equipment modifications the Royal Regiment effected during the war.

CHAPTER II

ON THE EVE OF WAR

Success in warfare can be attributed to many separate and interrelated elements. Not the least of these include adequate planning and training, tested and improved armaments, sufficient manpower and capable leadership. On the surface the British Army in 1899 had more than its share of all these elements and coupled with its colorful traditions, pomp and pageantry enjoyed a prestigious reputation throughout the world. However, the difficulties and reversals confronted by the British Army in the initial phases of the campaign in South Africa demonstrated vividly, built-in and engrained inadequacies in the British military system. Along with other shortcomings, these were rooted in the conditions of the army's training, planning and equipment posture maintained during the decade immediately prior to the outbreak of hostilities in October, 1899.

On the eve of the Boer War the British Army and the Royal Regiment of Artillery were confined and limited within an environment either allowed to exist or created between the years 1888-1899. Such restrictions were manifested in outdated and confused mobilization planning, small scale training, poor cooperation between combat elements, limited tactical and strategic thought, nearly obsolete guns and howitzers for the artillery, and manpower limitations. By 1899, the British Army was living in the past when rudely shoved into a newer era of warfare in

the "last of the gentlemen's wars."[1]

The British Empire during the last decade of the nineteenth century was gigantic, and its possessions extended around the world. The need to provide for its security and defense fell to the navy and army. The commercial sea lanes to and from the colonies, Britain's economic lifeline, were guarded by the Royal Navy. The army on the other hand provided security for the colonies and defense for the home islands. This required manpower, but throughout the ten years prior to the Boer War, the number of men available to carry out the defense mission was limited, and thereby, contingency planning was restricted. The army's plans were always based on what was on hand, rather than what was needed to accomplish the defense task and handle unforeseen contingencies. The number of men under arms in the Regular Army in 1898, for example, was 225,027, while in October, 1899, the British Army amounted to 249,466.[2] The period from 1898 to the Boer invasion of Natal in 1899, was most critical, yet an increase of only 25,000 regular forces was allowed. The pattern was similar throughout the decade as the military sought to increase forces to adequately perform the tasks demanded by the mobilization plans.

The British mobilization plan was confined to the existing forces,

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[1] J. F. C. Fuller, The Last of the Gentlemen's Wars: A Subaltern's Journal of the War in South Africa, 1899-1902 (London: Faber and Faber, Limited, 1937).

[2] The Times (October 16, 1899), p. 11. [Reportedly, the Royal Regiment of Artillery consisted of 14,932 men in the Field Artillery, 3,669 in the Horse Artillery, 1,383 in the Mountain Artillery, and the Garrison Artillery numbered 18,326.] Great Britain, Report of His Majesty's Commissioners, p. 33. There was a reserve force of 90,000 men available, and beyond that a militia of 129,000. If the situation was indeed critical a volunteer yeomanry force of 12,000 was available.

but more importantly, the scheme remained relatively unchanged after its development in 1888. Mobilization planning was a relatively new tool in the hands of military authorities, since deployment planning had never existed formally, prior to 1886. In the course of that year, Major General Henry Brackenbury, Chief of the Intelligence Branch, compiled three separate mobilization reports dated April 14, September 23, and October 14, and presented them to the Army Adjutant-General, Lord Wolseley, and the Secretary of State for War, W. H. Smith. They directed Brackenbury to chair a committee to carry the study further. By December, 1886, portions of the study were completed and submitted. The conclusions reached by the committee were that the forces available to the Empire could provide two army corps and a line of communication for employment abroad. The plan in no way dealt with what the Empire should have, but simply involved "what the existing cadres could furnish."[3] With this much done, the work lay idle until 1888, when a separate Mobilization Section was established and placed under the purview of the Adjutant-General's Office. For the next two years the section functioned generally without any specific direction and continued to maintain and improve plans for deployment abroad.

While this work was being done, it was revealed to Wolseley that only two army corps and a portion of a third could be employed for home defense. He immediately began seeking a definition of the mission of the army from the War Office. A significant shortcoming in the planning was the lack of clearly defined priorities in mission. Since both forces for deployment abroad and those for home defense were drawn

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[3]Ibid., p. 247.

from the same source, the inherent manpower limitations demanded that the War Office make some decisions. In June 1888, Wolseley recommended to the War Office that, along with the two corps for foreign dispatch, home defense should consist of three army corps and six brigades of cavalry.[4]

Finally, after several months of waiting, F. W. Stanhope, the new Secretary of State for War, in December, 1888, issued a memorandum which laid down the essential tasks of the army. In essence, it stated that the army should do what it could with what it had, and still provide full garrisons for the colonies, particularly the naval coaling stations, as well as providing the two army corps and part of a third for home defense. Stanhope foresaw no threat in Europe, nor a probable situation in the colonies that would require the dispatch of two army corps. His guidance in the final analysis was that the military should organize the forces "sufficiently for the defense of this country." Thus, nothing had changed and the army had to perform its mission with what was present yet still provide full security for the Empire.[5]

In February, 1890, using the assumption that "any arrangements for home defense helped equally for a foreign expedition," the priority objective of mobilization was officially changed to manning the defenses of the home islands, in particular around London. Thus, the overseas deployment of two army corps became a secondary task. After

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[4]Ibid., pp. 247-248.

[5]Ibid.

carefully planning the defenses of the home islands and considerable coordination between the Adjutant-General's Office and the War Office, it was determined that the minimum force needed to man the defensive line was three army corps. The Mobilization Section, again working with the numbers that were available, concluded that, still, only two full strength army corps and a portion of a third could be raised from the Regular Army. This revelation confirmed a critical condition in the military, but the Stanhope decision remained in effect as the definition of mission and limitation of manpower authorized for the British Army.[6] By 1894, the new plans were revised to incorporate some additional forces, but the needs of the colonies were continuing to increase and continental powers were improving and expanding their armies as well.

Noting the build-up of continental armies and the growing tensions in Natal, the Cape Colony and Egypt, Wolseley in 1896 sought to increase the number of artillery weapons per thousand men in the British Army to parity with German and French Armies. The Germans and French, respectively, had five guns and four and one half guns per thousand infantry and cavalry troops. There were 324 guns available in the British Army, and to reach parity, an increase of ten batteries or sixty guns was necessary, with an additional ten batteries required to adequately support the Reserve Militia Brigades, which at that time had no artillery at all.[7] With these estimates in hand, Wolseley advised Stanhope's successor, the Marquess of Landsdowne, that "20 [sic]

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[6] Ibid., p. 247.

[7] Ibid., pp. 226-228.

new batteries should at once be contracted for," and he further urged that the War Office recognize five guns per thousand, the same proportion used by the German Army, as "the standard proportion for our Army."[8]

Basing his conclusions on the 1888 Stanhope decision, to maintain a small land force for dispatch to a foreign theater, and minimizing the General's concern regarding any European threat and the tensions in the colonies, Landsdowne refused to consider such a costly increase as the Commander in Chief demanded. Instead, he asked Wolseley to provide information concerning the minimum increases in manpower required for home defense and the colonies along with reductions in other areas that would limit the costly additions. These and other specific questions were asked in view of three assumptions:

> (a) the forces now in Egypt and Natal must continue to be regarded as temporary,
> (b) the garrison of the Cape will not exceed what is necessary for the security of the naval stations,
> (c) no increase to the organised forces available for home defence is sanctioned beyond the 3 [sic] Army Corps authorised in 1888.[9]

Landsdowne's shortsightedness regarding the future needs of the army forced Wolseley to decrease his demands for forces, and thereby correspondingly reduced any planning latitude for future contingencies that would have been gained had the request been approved.

In light of his previous request, Wolseley's supplementary proposal submitted on October 30, 1896, significantly reduced the number of artillery batteries requested. An increase of only seven batteries of

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[8] Ibid., pp. 228-229.

[9] Ibid., pp. 229-232.

Field and Horse Artillery, a total of forty-two guns and 12,716 personnel, was demanded.[10] The following December, Landsdowne recommended to the Cabinet that the increases in field artillery were unnecessary, but he did concede five battalions of infantry for colonial service and 2,722 men for colonial Garrison Artillery companies should be raised.[11] Nevertheless, over the next two and one half years field artillery was increased gradually, until Under Secretary of State for War, George Wyndam, announced in March, 1899, that the Regiment amounted to 116 guns for the Horse Artillery and 480 guns for the Field Artillery.[12]

The conditions in manpower and planning that existed in 1888, with only minor modification created by the increasing tensions in South Africa, were relatively unchanged when the Transvaal crisis exploded into war in 1899. The mobilization plan hammered out from 1886 through 1894, was ordered into operation on October 7, 1899, as the threat of open war grew. In essence, Great Britain was going to war based on a decision made in 1888.

Spinoffs of contingency planning can be widespread and as a result of the Stanhope decision in 1888, tactical and strategic thought shifted from coping with colonial guerrilla warfare to emphasis on confronting a continental army on the doorstep of the home islands or on the main-

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[10]Ibid., p. 236. Hereafter "Horse Artillery" is associated as supporting cavalry forces and "Field Artillery" as supporting the infantry. Furthermore, "field artillery" is a general term incorporating both Horse and Field Artilleries to differentiate them from "Garrison Artillery."

[11]Ibid., pp. 240-241.

[12]Great Britain, Parliament, Parliamentary Debates (House of Commons), 4th Ser., Vol. LXVII (7 Mar.-20 Mar., 1899), p. 1345.

land itself. The British Army was rich in experts in guerrilla war with such figures as Sir Redevers Buller who served heroically in the Zulu Wars in 1879, Lord Roberts of Kandahar who was commander of forces in Ireland, and Wolseley who served in Burma and in the Indian Mutiny. Nevertheless, the significance of European warfare overshadowed this expertise, and the army seemed more than enthusiastic about the study of the great land battles fought during the nineteenth century.

The last great land war in which Great Britain had participated was the Crimean Campaign, ending in 1856. It served as the object of considerable study as well as hero worship until the overwhelming successes of the Germans in the course of the Franco-Prussian War (1870-1871) demonstrated some new and important developments in warfare and tactical employment of forces. The importance of coordinated effort by all elements committed to an action was clearly portrayed in the war. Before each engagement, the Prussians fired heavy artillery preparations while their characteristically widespread and single-line skirmishes were being prepared for the assault. These fires were directed first at opposing cannon, then shifted to the infantry defense line, and finally fell silent when the assault began. The effect was devastating. The British accepted the artillery preparation or "artillery duel" as an essential step in the attack, but depended on infantry arrayed in three successive lines as the best employment.[13]

The successive lines theory constituted the idea of depth of forces at a decisive point along the defensive line. The first line

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[13]Neil Malcolm, ed., The Science of War: A Collection of Essays and Lectures, 1891-1903, by the Late Colonel G. F. R. Henderson, C. B. (London: Longmans, Green and Company, 1916), p. 135.

beat down the enemy's rifle fire and carried to the embattlements. The second line, not unlike the Peninsula Campaigns against Napoleon, relied on the cold steel of the bayonet to "bring the battle to a speedy conclusion," while the third carried the embattlements and pursued the beaten enemy.[14] Although the British refused to adopt the Prussian infantry formation, the successive line system in conjunction with heavy artillery preparatory fires became a tactical axiom.[15]

In addition to alignment of troops, the importance of fire discipline under superior commanders was looked upon as the most effective small arms fire. Firing individually on targets of opportunity was considered less effective. One of Britain's most highly respected military men, Lord Roberts of Kandahar, was among the most vocal spokesmen for controlled firing, and pointed to the results of the Franco-Prussian War as evidence of its effectiveness. According to Lord Roberts, "good rapid volleys under the control of a practical commander constitute the very essence of military shooting."[16] Further proven by the British themselves during the Zulu uprising in 1879, the controlled firing principle was an integral part of rifle training throughout the British Army.

The Franco-Prussian War further demonstrated the difficulty and costliness of attacking prepared defenses frontally, and gave rise to

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[14] Ibid., pp. 132-133.

[15] Ibid., p. 162. The difficulties of continuous fire support grew from the dependency upon direct fire techniques, which the infantry and cavalry reduced by masking the artillery when on the assault. Furthermore, the artillery duel announced the impending assault, and gave the enemy the opportunity to ride out the preparatory fires and await their eventual silence as the assault began. Until continuous fire support could be achieved, the element of surprise was substantially removed by the artillery duel.

[16] The Times (September 23, 1899), p. 6.

some advocates of defensive tactics rather than bear the cost of the offensive.[17] Others refused to give up the idea of success through offensive action. To escape the destruction of a frontal attack, they favored the flank attack as the decisive key to battlefield success. To employ flanking maneuvers required speed and mobile reconnaissance. Both these elements were found in the cavalry, and the spectacle of cavalry maneuvers was truly an example of the rich tradition and pageantry of the British Army. Unfortunately, it was also much more and clearly demonstrated the entrenchment of cavalry tactical thought in the glories of the past.

The arme blanche in the 1890's still clung stubbornly to their sabres and lances, while disdaining the carbine in their saddle scabbard. For the cavalry "shock tactics, the charge and the hand to hand encounter" were the essence of its action. Its standards of excellence were embodied in "manoeuvering in great masses, maintaining an absolute uniformity of pace and formation, and moving at the highest speed with accurately dressed ranks."[18]

The artillery, the third combat element in the British Army, also learned important lessons from the Franco-Prussian War. The most obvious conclusion from the German example was the overwhelming power that coordinated and consolidated artillery fire could generate. This was further exemplified by the British themselves during the campaigns

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[17] W. H. James, "Modern Weapons and Their Influence on Tactics and Organization," Journal of Military Service Institution of the United States, XXVI (1900), pp. 259-272.

[18] Malcolm, p. 50.

in the Sudan in 1898.[19] To accomplish the massing of fires, artillery held in reserve was dropped from practice and all guns available were committed to the action. This necessitated that all batteries closely accompany the forces they were supporting. In most cases, particularly with the infantry, the batteries were required to position themselves well ahead of the assault forces, or as a minimum, parallel to them on the flanks. This positioning was the result of direct fire techniques which demanded that the artillery crews observe the target for correction of fire and final target effectiveness.[20] In addition to these requirements, the artillery by the nature of its support mission was required not only to apply its own particular conclusions from the German success, but also it had to apply them in light of infantry and cavalry techniques adopted.

All these and many, many more examples were absorbed from the Germans after 1871, and later the Russians after 1877, and upon their adoption, these tactical lessons became integral parts of training in the British Army. On the training fields practical application of

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[19]Lord Kitchener of Khartoum gained his prestigious reputation during the Sudan Campaigns against the Dervishers. The campaign is further distinctive, since the last full scale cavalry charge in modern warfare was conducted by the 21st Lancers at the Battle of Omdurman on September 12, 1898.

[20]The Times (September 4, 1899), p. 8; Edward S. May, Field Artillery with Other Arms (London: Sampson, Law, Marston and Company, 1898), p. 37. Indirect fire techniques, or fires which are not observed by the gun crew, but rather by a separate observer were known. However, the technique was not fully perfected or widely used. Direct fire as observed by the gun crews within full view of the target is not unlike sighting a rifle. Furthermore, the dependency on shrapnel shells with a time fuse to achieve an air burst, limited ranges in the British 12-pounder and 15-pounder guns to under 4,000 yards. Beyond that range shrapnel bullets had reduced velocity and limited effect. Major May advocated locations as near as 1,500 yards as giving the best results from fire.

theories, combined with discipline, teamwork and well-coordinated action became the ultimate ideals to achieve. But the British training suffered from an acute limitation in training facilities.

The home islands were dotted by numerous military posts, but only a few such as Aldershot and Okehampton quartered more than a battalion at the very most. Adjacent training areas were equally small, since most posts consisted of little more than barracks and a parade ground. A combination of branches of the army stationed at these smaller posts was also a rarity. They were either cavalry or infantry stations, while the artillery remained at Okehampton, Aldershot and Woolwich, where larger ranges existed for their practice. It was truly a garrison army with garrison duties, and training on a regular basis was limited to drills and formations. With posts scattered all over the islands, training took on a decentralized countenance, with local commanders determining the needs of their particular units. Direction and guidance from the General Staff consisted of drill regulations, and standards of discipline. This created an environment of formalized training where spit and polish and elaborate drills became the essence of training and discipline. Although this outward appearance of excellence was marvelled at by the civilians, and gloated over by commanders, it did very little to prepare the army for combat.[21]

Fortunately, there were instances of training in depth being carried out, but these were not widespread. In the colonies, especially in India, training was on a large scale and very systematically conducted. At larger stations in England, voluntary societies such as the

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[21]John K. Dunlop, The Development of the British Army, 1899-1914 (London: Methuen, 1938), pp. 23-24.

Royal United Services Institution and the Royal Artillery Institution existed. There, conscientious officers could hear lectures and publish their own theories. However, these societies did not receive governmental subsidy; rather, they existed on private funds and membership dues. Fortunately, their existence did provide outlets for the more inquiring officers, and served to reduce the intrenching nature of garrison training.[22]

The need for a more centrally supervised and realistic training program was apparent to some in the Army. By the mid-1890's efforts were being made to conduct training operations, on a broader scope. But it was not until 1898, that the Army held any large scale combined maneuvers. These maneuvers were indeed unique, since the last large scale training operation occurred in 1875. The results of the extended absence of combined maneuvers was readily apparent at the end of the operation. It was obvious from the results of the training, that staff and commanders were on unfamiliar ground when handling large numbers of troops, and cooperation between branches was utterly lacking.[23] As a result, in August of the following year, 1899, another large scale combined training maneuver in Ireland and a large artillery training operation at Salisbury Plain were held. Additionally, in September another smaller combined exercise at Aldershot was carried out.

The Irish maneuvers began on August 5, and ended on August 15. They pitted two forces against each other in a stylized war. On one

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[22]Malcolm, p. 395.

[23]Ibid., pp. 396-397.

side 3,800 men and sixteen guns participated, while on the opposing side 5,200 men with sixteen guns were employed. For eleven days the mock war roared in Queens County, Ireland, and by the end of the training much had been gained but even more had been revealed.[24] The director of the maneuvers, Lord Roberts, left no one unscathed in his critique. He noted that when on the offensive, "care was invariably taken to provide superior numbers at the decisive point," but he explained further, "secondary attacks or feints were insufficiently used." Moreover, he pointed out that "the artillery did not always cooperate with the infantry, and the infantry often neglected its flanks." In addition, one of the most glaring shortcomings resulting from the maneuvers, aside from the lack of cooperation, was the inadequacies in reconnaissance among all elements. Lord Roberts emphasized that poor forward reconnaissance limited decision making on the part of commanders, and for the artillery caused delays in occupation of new positions.[25]

At the same time the Irish maneuvers were being conducted, six brigade-divisions of artillery were training on the Salisbury Plain. Beginning on August 4, and ending on August 12, the emphasis of the exercise was to gain cooperation of the artillery with other arms, but more importantly for the artillery, the exercise was conducted to practice cooperation of the artillery units within the batteries and the brigade-divisions themselves.[26] The theory of massing guns was

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[24]A. M. Murray, "The Irish Manoeuvers, 1899," Proceedings of the Royal Artillery Institution, XXVI (1899), pp. 461-467.

[25]The Times (August 31, 1899), p. 6.

[26]Ibid., (August 15, 1899), p. 5.

practiced over and over during the eight days of training. Observers were impressed by the size of the force, since eleven six-gun batteries and six four-gun batteries, a total of ninety guns, participated in the exercise. The results of the training were inconclusive, however, because the six brigade-divisions were mythical, three battery organizations that were disbanded upon completion of the training. It was unlikely that the batteries which participated would ever train or be assigned together again.

Later, at Aldershot, in September, 1899, General Redevers Buller, the director of the maneuvers there, echoed the criticism voiced earlier by Lord Roberts. Reconnaissance was badly lacking and cooperation between elements was alarmingly poor. General Buller noted that attacks were "half-hearted and insufficiently supported," and he admonished all commanders for failing to communicate with each other. He urged subordinates, particularly artillery commanders, to "obtain sufficient information from the supreme commander as to his intentions."[27] Obviously, if this was accomplished, cooperation between elements would be enhanced.

These maneuvers clearly pointed to the importance of intense training in reconnaissance and coordinated efforts among the infantry, cavalry and artillery. At the same time it indicated the failings of the formalized training, and its inability to cope with modern warfare and the ever improving weapons that were being developed.

Weaponry along with other important aspects of warfare such as probable enemies, terrain and past experience lends impetus to tactical

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[27] Ibid., (September 12, 1899), p. 8.

thought and training. Historically, one of the most important, if not the dominant, factors in creating changes in tactical employment and equally affecting training, was the development and improvement of armaments. Signposts along the historical path of tactical changes in warfare are marked by the advent of the longbow, the development of blackpowder which sired rifles and cannons, and the creation of ironclad ships with steam power which overcame sailing vessels, to name but a few.

The nineteenth century produced signposts of change in tactics and training with some startling developments in weaponry. In the first decade, Napoleon indelibly etched into the minds of military men the importance of artillery. The American Civil War had given rise to cavalry forces armed with breech loading rifles instead of sabres and lances, and they became known as mounted infantry. Further, the Civil War vividly demonstrated the futility of the cavalry charge against a well-armed opposition. By the 1890's magazine-fed, bolt-action rifles, such as the Lee-Metford and Mauser, in the hands of practiced marksmen increased firepower and extended the boundaries of the battlefield. Breech loading, rifled cannons increased the volume of fire and the range of supporting artillery. The advent of Maxim and Gatling machine-guns created a hail of bullets never before conceived as possible. With such firepower, fewer men were required to hold a portion of the terrain, thereby releasing more men for maneuver elements. Smokeless powder, first adapted to rifles and later to artillery, allowed the benefits of invisibility on the battlefield to be employed. Massed guns had proven devastating, and by the early 1890's "quick-firing" equipment on naval and coastal artillery pieces increased their

rates of fire. It was evident that the quick-firing principle was soon to be applied to field pieces. The nation to achieve it first would undoubtedly enjoy a decided advantage over any potential enemy, since its impact on tactics had not been fully investigated. Beginning in 1890, the goal of every gun-maker in Europe and in the United States was to design a system to control weapon recoil, the root cause of delays in firing and fatiguing labor. The last half of the final decade of the nineteenth century was a period of frenzied artillery rearmament activity as nations throughout the world adopted intermediate systems in search of the true "quick-firing" artillery.[28]

The first attempts by the British to alleviate the recoil problem were the attachment of spades to the gun trail which, providing the soil was soft enough, buried themselves in the ground when the first round was fired. If the surface was hard or rocky, the fatiguing run-up and relaying process between each round had to be followed. If the spade was buried, another problem was created in that no traversing of the piece could occur unless the weapon had a traversing gear on the weapon carriage. However, the spade did increase the volume of fire to a noticeable degree, and it was a step toward "quick-firing"

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[28] A. S. Buckle, "The Advantages and Disadvantages of Q. F. Guns," Proceedings of the Royal Artillery Institution, XXV (1898), pp. 357-358. "A Q. F. gun may be defined as one which is so constructed and mounted that it may be loaded, layed, and fired quickly; that is quickly as compared with an ordinary B. L. [breechloader] gun. For use on board ship or in a fort, where there is no objection to extra weight or complication, it is now easy to produce Q. F. guns that can be fired 'from the shoulder,' as it were like a rifle: and the operation of loading can be simplified by the use of fixed ammunition without disadvantage." Fixed ammunition consists of a projectile and powder increments in a fixed cartridge, similar to rifle ammunition.

artillery.[29]

Even though the British made some tests on a few new weapon designs, they seemed satisfied with the breech loading weapons with the attached spade, and made little effort to adopt the quick-firing principle further. In 1898, that was not the case with other European nations, however. By the end of that year, Germany rearmed its artillery with what it termed Q. F. guns, but upon investigation by the British, it was found that the guns were simply outfitted with trail spades and wheel brakes to obviate the recoil.[30] It was France that really created a stir with the adoption of its Q. F. guns in 1898 and 1899. The weapon was kept as a top secret item for a number of years after its development, but rumors of its stability and rapid fire capabilities were widespread. Major General Henry Brackenbury, the new Director General of Ordnance, hinted at its uniqueness in May, 1899, at a meeting of the Royal United Service Institution. He told the gathering, "you will shortly learn that the French have got a real quick-firing field-gun....[they] think that this will require changes in tactics." The French reinforced their claim and faith in the new weapon by reducing the number of guns in a battery from six to four.[31]

In 1894, Austria began experiments with quick-firing guns, and

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[29]May, pp. 292-295; C. A. L. Graham, The Story of the Royal Regiment of Artillery (Woolwich: The Royal Artillery Institution, 1944), pp. 74-75.

[30]L. R. Kenyon, "Q. F. Field Equipments on the Continent," Proceedings of the Royal Artillery Institution, XXVI (1899), pp. 139-145.

[31]James, p. 282; Charles Callwell and John M. G. Headlam, The History of the Royal Artillery from the Indian Mutiny to the Great War (2 vols. Woolwich: The Royal Artillery Institution, 1937), Vol. 2, p. 13. The French weapon was the well-known and widely used French "75" of World War I fame.

in 1896, Spain began testing Krupp, Maxim-Nordenfelt and Saint Charmond weapons.[32] In addition to these countries, Belgium, Switzerland, Russia and Italy all began testing weapon designs after 1895. By 1899, Turkey had ordered 1,000 German Q. F. guns, and Russia, Austria and Italy had adopted intermediate systems to increase rates of fire. They along with Belgium and Switzerland were continuing to test new weapon designs.[33]

The continental situation as well as the growing tensions in South Africa, where the Boers had begun outfitting their Staats Artillery with Q. F. guns as early as 1896, made it incumbent on the British to begin testing quick-firing guns. Serious and wide-spread study regarding the quick-firing principle occurred in England between 1897 and 1899, and numerous articles began appearing in professional military journals of the period.[34] In Parliament in February, 1899, questions were being asked of the War Office concerning the adoption of Q. F. guns. On February 13, George Wydham, Under Secretary of State for War advised Parliament that conversion of Horse and Field Artillery batteries to quick-firing guns would begin in March, and proceed with the least possible delay.[35] Four days later, however, he advised that the change-over was a slow process and would require time.[36]

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[32] Kenyon, pp. 147-151.

[33] Ibid., pp. 155-156.

[34] Ibid., p. 158f. Kenyon points out that the Boers ordered Q. F. guns from the Schneider manufacturers in 1896.

[35] Great Britain, Parliament, Parliamentary Debates (House of Commons), 4th Ser., Vol. LXVI (7 Feb.-20 Feb., 1899), p. 666.

[36] Ibid., p. 1282.

The weapon selected for adoption by the British artillery was a Vickers manufactured 3-inch, 12½-pounder, and its adoption was indeed slow. The report of the Times in January, 1899, seemed to set the tone of British rearmament: "unless the unforeseen precipitates matters, it may be some time before a general rearmament of the Horse and Field Artillery takes place."[37] As late as September, 1899, the only evidence of steps to increase the rates of fire of the Royal Regiment's weapons was additional modification to thirty-six existing 12-pounder and 15-pounder, breech loaders, by adding a spade suspended from the axles.[38] As for the Vickers weapon, it appeared in the inventory later, and only after many additional tests were made on the system.

As of September, 1899, the Royal Regiment was armed with 3-inch, 15 pounder, breech loader pieces for the Field Artillery, and a lighter weight, 3-inch, 12-pounder, breech loader pieces for the Horse Artillery. Both weapons were designed and adopted in 1884, and modified in 1895, to accept smokeless cordite powder. Each weapon had a maximum shrapnel range of 3,650 yards. Furthermore, these weapons fired shrapnel shell exclusively, and carried no other shell type in their limber. The Field Artillery had additional heavy howitzer batteries equipped with 5-inch howitzers. Since this weapon had a higher trajectory than the field gun and a maximum range of 4,900 yards, the

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[37]"Vickers Quick-Firing Field Equipment," Journal of the Military Services Institution of the United States, XXIV (1899), pp. 145-148; The Times (January 16, 1899), p. 4. Weapon designations within the British Army varied between shell weight and muzzle size or caliber. Generally speaking, within the scope of this study, weapons under three inches in caliber are designated by shell weight. Those weapons larger than three inches are designated by caliber.

[38]Callwell and Headlam, p. 14-15.

5-inch howitzer was employed to search enemy lines with its explosive lyddite shells or if need be, its shrapnel projectiles.[39] Garrison Artillery, as the name implies, was not a mobile force. Quite the contrary, it manned the coastal artillery fortifications at home and in the colonies with its huge stationary mounted 6-inch naval guns and 4.7-inch quick-firing artillery pieces.[40]

In addition to weapons and beyond leadership, which can only be adequately tested in battle, the final element of an efficient military establishment is its organization. The mythical brigade-division has already been touched upon, and it was not the only illusionary organization in the British Army. The two army corps prepared for deployment to a foreign theater and the two reinforced corps for the home defense were in existence only on paper. There were no corps or division commanders or staff. When mobilization occurred, units were picked from throughout the Empire to come together as a division or corps under a commander and staff who had not trained them nor administered

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[39]U. S., War Department, Office of the Chief of Staff, Second (Military Information) Division, Selected Translations Pertaining to the Boer War (Washington: Government Printing Office, 1905), p. 23. The shrapnel shell is analogous to buckshot in a shotgun shell, except the shrapnel shell was used with a time fuse to achieve an air burst. The burst of the shell opened the casing and the velocity of the shell propelled the shrapnel pellets. As range increased, velocity decreased, and the shrapnel effect was correspondingly diminished. Therefore, the maximum range for best effect in the 12 and 15-pounders was 3,650 yards. Beyond that range, even though longer ranges could be achieved, the velocity diminished to a point where the pellets simply fell uselessly to the ground. Shrapnel shell, however, was very effective and efficient against unprotected troops within its range limitations. Lyddite shells were purely explosive. Initially developed for the navy, they were ignited with a point detonating fuse. The lyddite shell depended upon its explosive shock wave to inflict damage, since it had very little fragmentation effect.

[40]Ibid., p. 24.

them. The units which made up the divisions and corps may have come from a proud regiment, but upon mobilization the regiment had no guarantee it would fight as a unit.[41]

The Royal Regiment of Artillery was no different from any other branch in the Army, but to add to the organization confusion further, on January 28, 1899, a Royal Warrant was issued that reorganized the Regiment. The warrant stated:

> The mounted and dismounted branches of the Royal Regiment of Artillery shall be separated into two corps under the general title of Royal Regiment of Artillery to be named respectively (a) the Royal Horse and Field Artillery; (b) the Royal Garrison Artillery.[42]

Although exchanges of personnel between branches of the Regiment were authorized, they were limited to transfers between the Royal Horse and the Royal Field Artilleries. The Mountain Artillery found itself designated as Garrison Artillery, and since most of its personnel were either Horse or Field artillerymen considerable grumbling in the Garrison ranks could be heard. It was decided that Garrison artillerymen could transfer to the Royal Horse or Royal Field Artillery when openings presented themselves.[43] Otherwise there was no movement by personnel between branches. As one observer put it, "a stroke of a pen has deprived our mobile Army of an artillery force of over 15,000 men and 800 officers trained to the working and moving of heavy guns."[44] This comment emphasized the fact that these men were absolutely con-

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[41] The Times (October 9, 1899), p. 8.

[42] Ibid., (June 3, 1899), p. 9.

[43] Callwell and Headlam, pp. 2-4.

[44] The Times (November 13, 1899), p. 16.

fined to the Garrison Artillery ranks, with little or no hope of using them in the other branches should the need arise.

Thus, the British Army stood on the eve of war in 1899. After months of diplomatic meandering between the British Government and Transvaal tensions boiled over, and on October 11, 1899, the Boer Army crossed the Vaal River into Natal and the Cape Colony, to test the mettle of the British Army. Few thought it would last for long, and most were of the same opinion as a German officer who opted that the Boers were about to face "the best equipped and most experienced regular artillery supported by picked Cavalry regiments, recognized in Europe as the finest in the world."[45]

There was little doubt in most Englishmen's minds that was a true evaluation of the British Army, but there was unfortunately, an undercurrent of intrenchment in past glories and inflexibility toward change in the British military. Planning, tactical thought and training were all based on one man's decision made in the midst of the realities of 1888, not 1899. Organization was purely a paper drill that yielded an absent chain of command and lack of unity. The glories of the past were epitomized in the sabre-bearing cavalry which, ignoring the lessons of the American Civil War, allowed their carbines to rest in their saddles. The artillery, heralded as one of the best in the world, was equipped with fifteen year old weapons that were no match for the newest guns being manufactured in Europe. Training, the key to discipline and knowledge, was so decentralized that it had become unimaginative and lacked realism. When large scale training was accomplished

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[45]Ibid., (October 11, 1899), p. 10.

only two months before the war, reconnaissance, the key to decision making and target acquisition, was acutely lacking, and cooperation between elements was poor as well. The British Army had identified these shortcomings, but time was needed to improve the deficiencies. Time, however, was passing them by. War was in the offing, and the army was going to see the weaknesses reoccur again and again with disastrous results before they were corrected.

CHAPTER III

FROM TALANA HILL TO BLACK WEEK

When the Dutch republics received the British rejection of their ultimatum on October 11, 1899, columns in the Drakensburg Mountains, bordering the strategic wedge formed by Natal began crossing in mass. In the west, similar elements closed on Kimberley and Mafeking. By October 16, 1899, both towns were under siege and the British Natal forces were being pressed toward Ladysmith. On November 2, only two days after the arrival of General Buller in Cape Town, Lucas Meyer, commander of Boer forces in Natal, occupied the town of Colenso, thirteen kilometers south of Ladysmith and 10,000 British troops were encircled. Upon the completion of investment of British Natal forces, the Boers refrained from making further marked advances into Natal and the Cape Colony. This hesitancy allowed General Buller time to build up his forces and prepare for his own offensive.

Buller's original plan called for an offensive thrust along the DeAar-Mafeking Railroad in the west to the capital of Transvaal, Pretoria. The plan assumed General George White's forces in Natal would remain active until the offensive began. Once on the move, the Boers in Natal would be compelled to withdraw to protect their capital, and thereby relieve the pressures on General White so he could assume an

offensive posture as well.[1] Ladysmith's investment scuttled the plan, and Buller decided to redistribute his forces to relieve the invested towns in both theaters, as well as reinforce and stabilize the situation in northern Cape Colony.

General Paul Methuen was given command of the First Division and assigned the mission to relieve Kimberley and Mafeking. General William Gatacre was given a composite detachment and assigned the northern Cape Colony. In Natal, General Francis Clery was given a division, and Buller himself assumed command of that theater to relieve Ladysmith.

When all forces were collected and prepared for the offensive, Methuen in the west moved first. His advance began well enough, with victories at Belmont on November 23, Graspan on November 25, and at the Modder River three days later on November 28. After the Modder River engagement, the British paused to regroup and reinforce. The flush of victory was growing, but shortly disaster struck. At Stormberg Junction on December 10, General Gatacre's forces suffered a crushing defeat, followed the next day by yet another defeat at Magersfontein, where Methuen's division suffered severe casualties. These two defeats were shattering, but on December 15, General Buller's attack on Colenso was repulsed. In a matter of six days the British Army had suffered smashing reversals in all theaters of the war zone, losing 2,796

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[1]Great Britain, Report of His Majesty's Commissioners, pp. 271-272.

soldiers, killed, wounded and captured.[2]

After these defeats, the inadequacies that had been identified in training in August and September, along with some new revelations of warfare were clearly in the open. Criticism ran rampant in the wake of the reversals, and among the most prevalent accusations were those directed at the Royal Regiment of Artillery. A great hue and cry arose over the apparent success of long range artillery over mobile field guns, and moreover, Boer field pieces had exceeded the range of the British 12-pounder and 15-pounder. The criticism became a parenthetical accusation that the Royal Regiment had provided inadequate support of maneuver forces.

However, examination of specific engagements, both victories and defeats, illustrates that the defeats were not totally the result of inadequate artillery. On the contrary, the Royal Regiment performed exceptionally in all engagements. Range limitations of Horse and Field Artillery batteries were a notable deficiency resulting from the initial engagements of the Boer War, but this deficiency was not the overriding cause of ineffective artillery support. It was obvious that the nature of the terrain and climate in South Africa caused the long range artillery guns to carve an impressive niche for themselves on the mobile battlefield, but speed and mobility remained a dominant feature of

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[2]L. S. Amery, ed., The Times History of the War in South Africa (7 vols. London: Sampson, Law, Marston and Company, Limited, 1900-1909), Vol. VII, App. III, p. 24. At Stormberg Junction, British losses were twenty-nine killed, fifty-seven wounded, and 633 captured or missing. At Magersfontein they amounted to 244 killed, 651 wounded and seventy-six captured or missing. At Colenso 171 were killed, 738 wounded and 197 captured or missing.

warfare.

The difficulties in artillery support ran deeper than simply range limitations. Most of the British difficulties were complicated by an initial unappreciative view of the importance that cover, camouflage and smokeless powder was able to assume in warfare. The Boer employment of these old and new facets of warfare exposed the British inadequacies. The immediate result of them was found in insufficient reconnaissance and poor coordination between maneuver elements and artillery. Poor reconnaissance yielded equally poor decisions on the part of the commanders, and of particular importance to the artillery, inadequate reconnaissance reduced target acquisition. The artillery engaged phantom targets, and ended in being called ineffective. Additionally, shrapnel shell and lyddite were proved adequate, but certainly not as destructive as had been anticipated. Confused and demoralized by the Boers' masterful use of camouflage and cover, coordination between elements, already identified as a weakness, fell into absolute disorder, and disaster struck.

The beginnings of British difficulties were identifiable in the early days of the war. In Natal, north of Ladysmith near the rail junction at Glenco and the coal mines of Dundee, two short but important battles were fought which illustrated possible future difficulties. On October 19, a brief but bloody battle was fought between the Boer advance elements and a British column under the command of General William Symons.

The Boers had hastily entrenched themselves along the crest of Talana Hill overlooking the small coal mining town of Dundee. Symons decided to attack the position, but the tenacious Boers were unwilling

to surrender the position quickly. Beginning early in the morning, the British assaulted the hill three successive times before the Boers decided to retire from the area leaving three of their six artillery pieces and losing 300 to 500 men.[3]

The British paid a heavy price for the victory, however. Counting General Symons, who was fatally wounded early in the action, fifty-seven were killed and ninety-two were wounded in the skirmish. Judging from the casualty figures, this battle was a fierce engagement.[4] From an artillery point of view, difficulties were already present. Three batteries of artillery were employed within 1,400 yards of the hill, and they fired almost continuously for three hours from that position before the Boers evacuated the hill. Ominously, the captured Boer guns were found intact, and moreover, the shrapnel shell employed by the British had failed to totally silence hostile small arms fire. The Boers, in covered trenches, although not elaborate, were provided with sufficient protection to allow them to engage the British infantry without fear of injury from artillery shrapnel.[5]

The second engagement to be considered was fought at Elandslaagte on October 22, and it produced similar results. Again the British artillery was brought close to the objective, within 1,800 yards. There at almost point blank range, the three British batteries poured

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[3]The Times (January 2, 1900), p. 12; J. P. Wisser, "The Second Boer War," Journal of the United States Artillery, XIII (1900), p. 258.

[4]Amery, Vol. VII, App. III, p. 24.

[5]The Times (January 2, 1900), p. 12.

shrapnel shell after shrapnel shell at the Boer position. The Boers again, taking advantage of the cover available, were able to keep up a murderous small arms fire. At one point in the battle, the British infantry advance stalled momentarily only 100 yards from the Boer entrenchments, as the Boers increased the volume of small arms fire. Overwhelmed for a moment the infantry waited for the hostile fire to reduce before they rose and overwhelmed the position.[6]

Clearly, the actions at Talana Hill and Elandslaagte were victories for the British, and much of the credit was attributed to the Royal Artillery. However, the Boer trenches had not been effectively penetrated, and subsequently, the artillery had not successfully silenced the Boer rifle fire. Furthermore, the artillery had not eliminated the Boer artillery, and repeatedly the Boers managed to reposition some of their guns in covered and protected sites. The Boer guns were assumed to be silenced and destroyed, but they frequently reappeared to engage the infantry. The British guns engaged the new Boer artillery position and silenced the weapon, only to have it reappear at a new location. Fortunately for the British, the Boer shrapnel shell was not functioning properly, or more casualties would have been suffered. The apparent ineffectiveness of the British shrapnel shell against the entrenched Boers was not appreciated, however, and the Times declared British superiority in artillery a "foregone conclusion." All that was seen was the victory.[7]

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[6] Ibid.; Wisser, p. 261. The account in the Times and that rendered by Captain Wisser note that the British rose to the charge in characteristic British tradition, with trumpet sounding and the piper playing a national air on the bagpipes.

[7] The Times (October 23, 1899), p. 8.

The cheers were soon silenced by the roar of a large caliber, long range gun hurling its ninety pound shells, first on the British camp at Dundee on October 21, and reappearing later as the skirmish near Reitfontein on October 24. The gun, nicknamed "Long Tom," was one of several Creusot, 6-inch garrison guns that the Boers had made mobile to employ as a field gun. The big gun far out-ranged the British field pieces. Additionally, there were four 12-centimeter Krupp mobile siege guns in the area around Ladysmith.[8] General White had already received intelligence information indicating that the Boers were in possession of heavy mobile guns, and in response to this information, and before their use at Dundee, he telegraphed Durban urgently requesting large caliber guns to offset the expected disadvantage.[9]

At Durban, White's request was greeted with some confusion, since no guns of large caliber were in a mobile configuration. However, at anchor in the harbor rested the H. M. S. Terrible, and the ship's captain, Percy Scott suggested that he and his men could build a carriage and limber to move the ship's 12-pounder and 4.7-inch quick-firing naval guns. Although scoffed at by some, Captain Scott, using wagon wheels and long wooden timbers for gun trails, succeeded in mounting one 12-pounder. A single 4.7-inch gun was taken from the ship, mounting and all, and bolted to four wooden beams. Then the

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[8] U. S. War Department, Adjutant General's Office, "Extracts from the Report of Captain Carl Reichmann, Seventeenth Infantry, on the Operations of the Boer Army," Reports on Military Operations in South Africa and China, 1901 (Washington: Government Printing Office, 1901), p. 131.

[9] J. A. Coxhead, "The Second Brigade Division, Royal Field Artillery, in the Natal Campaign, 1899-1900: Up to the Relief of Ladysmith," Proceedings of the Royal Artillery Institution, XXVII (1901), p. 440.

contraption was attached to wagon wheels and long timber trails.[10]

Once mounted it was necessary to determine if the new carriages could withstand firing without collapsing or turning over. Scott's design proved more than adequate, and the 12-pounder fired to a range of 9,000 yards without ill effect to the carriage. The larger, 4.7-inch gun threw its lyddite shell an amazing 12,000 yards, and no known artillery piece could match that. After the successful tests, Scott had four 12-pounders and two 4.7-inch guns similarly mounted.[11]

The problem facing the ingenious Scott at this point was determining how to move these monstrosities. The trip to Ladysmith was to be by rail, but once there, the guns were too heavy to be manhandled. Apparently he chose three double teams of horses, four abreast initially.[12] Later the horses were replaced by large teams of oxen. Unfortunately, there was no time to make the huge guns more mobile or pleasing to the eye, and satisfied with horse drawn weapons for the moment, three of the 12-pounders and two 4.7-inch guns were dispatched to Ladysmith. They arrived at General White's headquarters on October 30, just in time to participate in the withdrawal of two British columns which had attempted to take a "Long Tom" position at Lombard's Kop, four miles northeast of the city.[13]

During the night of October 29 and the morning of October 30, two

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[10] The Times (November 21, 1899), p. 7.

[11] Ibid.

[12] John McCrea, "Artillery: Its Employment in the South African War," Selected Papers from the Transactions of the Canadian Military Institute, 1902, XII (1903), p. 21.

[13] Coxhead, p. 440.

columns from Ladysmith had been sent to silence the big gun. In the process of the night movement toward Lombard's Kop, a flank security element composed of the First Gloucesters along with elements of the 10th Mountain Battery were separated from the main body and the Boers forced them to surrender at a position known as Nicholson's Nek. At that action alone 850 British soldiers were captured, and the British Natal force suffered a severe blow.[14]

The other forces, however, continued to advance toward Lombard's Kop only to find the position vacated. The adjacent ridges, however, were not empty, and the columns were engaged by small arms and artillery from concealed positions. The First and Second Brigade Divisions, six batteries in all, were moved up to support the elements in contact. They succeeded in suppressing the Boer fire sufficiently and the infantry and cavalry elements withdrew. In this instance, the British artillery had to run a gauntlet of small arms and shrapnel fire to get in position to support, but did so with minimal loss. It was evident that Boer shrapnel was poor in quality, and the fuse failed to detonate the projectile consistently. Even though the Boer guns ranged the British artillery, the results were less than satisfactory.[15]

Still the harrassing fires from the Boer artillery and small arms demanded withdrawal to Ladysmith, and when it began, the British gunners covered the retirement in a leap-frog fashion. At least one battery was left in firing position until the other forces were approaching its maximum range. At that point another battery would

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[14]Ibid., p. 473; Amery, Vol. VII, App. I, p. 1.

[15]Coxhead, p. 473.

go into position and the former limbered up and retired to the withdrawing column. To add to an already complicated maneuver, the British column was harrassed by the Long Toms throughout the movement. The newly arrived naval guns at Ladysmith were ordered into action to support the British withdrawal, by engaging the Long Toms at Pepworth Hill, two miles north of the city.[16]

The Times credited the naval guns with saving the day at Ladysmith, but not to be outdone, an artilleryman present in the action called the report "absurd." He elaborated by saying that the "200 jolly sailors were as gallant a body as any other 200 in the garrison but it took more than 200 to save Ladysmith."[17]

The Times was apparently convinced of the importance of the long range guns, but the growing severity of the situation at Ladysmith quickly clouded the issue. On November 2, reports from Durban and Cape Town indicated that Orange State Boers, commanded by General Lucas Meyer were in Colenso, south of Ladysmith. Ladysmith was invested.[18]

So began an investment that lasted until February 26, 1900, during which time, the Boers took special delight in bombarding the town with heavy guns. Soon, however, they proved ineffective on the whole, and the British troops in Caesar's Camp at Ladysmith, for example, began playing a cat and mouse game with the Long Tom at Bulwana Hill. After timing the flight of the Long Tom's shell, it was determined that thirty seconds was required for the round to fall at Caesar's Camp. An obser-

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[16]Ibid., pp. 473-475.

[17]The Times (November 3, 1899), p. 5; Coxhead, p. 479.

[18]The Times (November 3, 1899), p. 5.

vation tower was built, and when the Long Tom was moved into firing position, a bell was sounded, signalling the garrison to take cover. Later in the siege, the bombardment became routine and predictable. The Boers refused to fire on the Sabbath, and on weekdays they contented themselves by firing for a brief period each morning, noon and evening. As the siege progressed, the concern grew more for food and health than for injury by Boer artillery.[19]

Meanwhile, in Cape Town, General Buller had arrived and began his troop redistribution to effect the relief of the three invested garrisons. To provide for the relief of Kimberley and Mafeking, Buller allocated three brigades of infantry and a brigade-division of field artillery consisting of the three 15-pounder field batteries to form the First Division under Lord Methuen. A similarly configured division was placed under the command of General Clery and dispatched to Durban. A mixed detachment of three and one half infantry battalions and three field artillery batteries was given to General Gatacre. His division was placed at Queenstown, Cape Colony, to prepare for operations in northern sections of the Cape where Boers had control of Stormberg Junction and Naauwpoort.[20]

On November 19, 1899, Lord Methuen and his First Division was concentrated at the Orange River north of DeAar, and prepared to proceed with the planned offensive. Crossing the Orange River, Methuen's division transport train approached the outskirts of the city

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[19] Coxhead, pp. 476-478.

[20] W. H. H. Waters, trans., The War in South Africa: Prepared in the Historical Section of the Great General Staff, Berlin (London: John Murray, 1904), pp. 45, 233-235; The Times (January 2, 1900), p. 8.

of Belmont on November 23. Withdrawing Boers had formed a strong defensive position at Belmont, but failing to employ any of their own artillery, they were quickly overrun by the British. However, British casualties at Belmont were larger than had been expected, and indicated that dispersion by infantry elements had not been adopted by British forces.[21]

After the Belmont success, Methuen continued to pursue the withdrawing Boers, and drove them from defensive positions at Graspan on November 25. However, Graspan proved more difficult than Belmont. The Boers employed a battery of Krupp field pieces, one isolated Nordenfelt field gun and one Maxim machine gun in the action. At Belmont none of these auxiliaries had been used. Employing the 9th Brigade and the newly attached Naval Brigade, supported by two batteries of artillery, Methuen forced the Boers to withdraw after a three hour engagement.[22]

While Methuen was continuing his advance after the fall of Graspan, the Boers were preparing stiffer resistance. Along the Riet River on either side of the railroad bridge at the Modder River Station, a large Boer force was preparing entrenched and well-camouflaged positions. On the west side of the bridge, Free Staters occupied camouflaged trenches on both banks of the river. Transvaal Boers were similarly configured on the east side. Five Krupp 7-pounders,

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[21] "The Boer War in South Africa," Journal of the Military Service Institution of the United States, XXVI (1900), pp. 52-53; Amery, Vol. VII, App. III, p. 24. At Belmont, seventy-five British were killed and 223 were wounded.

[22] "The Boer War in South Africa," Journal of the Military Services Institution of the United States, XXVI (1900), p. 54. Indications that officers' uniforms made them excellent targets arose from the Belmont engagement. The Naval Brigade suffered heavily in the battle, and the Times (November 30, 1899), page 5, reported that "the naval detachment retained their swords; consequently they suffered excessive loss.... their total casualties being 100."

three 37-millimeter "pom-poms" and a Maxim machine gun were positioned on the north bank of the river near the railway station buildings. In all more than 5,000 men were deployed by the Boers.[23]

At 0500 hours, November 28, Lord Methuen's scouts reported the position was well-camouflaged and strongly entrenched, but they had failed to notice all the positions on the near or south bank of the river. Reportedly, Methuen was not convinced that the Boer position was as strong as described. Furthermore, the river itself was running full, and Methuen discounted a flanking movement to gain a fording position. In any case, he immediately deployed his Scots Guards only minutes after his scouts' report. Supported by a battery of artillery the Guards moved along the east side of the railway, advancing toward the river. The 9th Brigade supported by another battery of artillery advanced along the western axis. The Boer infantry had received orders not to engage the British infantry until they were within 100 yards.[24]

At 0530 hours, the Boer artillery engaged the British guns, and the British batteries quickly returned the volley. Soon, the entire Boer defensive line opened fire on the British infantry.[25] Methuen's artillery batteries began returning accurate shrapnel fire on the Boer trenches and the Guards began advancing again, only to be thrown back after suffering severe casualties. Still, the British artillery con-

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[23]Charles Parsons, "Narrative of a Boer taken Prisoner at Taungs, S. W. Border of Transvaal, During the War in South Africa, 1899-1900," Proceedings of the Royal Artillery Institution, XXIX (1903), p. 7.

[24]The Times (January 16, 1900), p. 6; Parsons, p. 8.

[25]Ibid.; The Times (November 30, 1899), p. 5.

tinued their shooting, even though under a murderous small arms fire. The Boer artillery on the north bank was silenced, and by noon the Orange State Boers west of the bridge had withdrawn after elements of the 9th Brigade had forded the river.[26]

The Transvaal Boers were now jeopardized by a possible flanking maneuver. Their commander, General J. F. DeBeer, dispatched messengers to the retiring Orange Staters, ordering them to return to their positions, but they refused. By nightfall, DeBeer was in an untenable position with elements of the British force crossing the river on the east as well as the west. At 2000 hours, DeBeer was ordered to retire and withdrawing his tired infantry and badly damaged artillery, he began an orderly retreat to Magersfontein.[27]

The British had achieved another victory, but again it was an expensive one. After counting casualties, the British had twenty-four officers and 459 enlisted men dead and wounded. Still, the Boers had been beaten at Modder River, and Lord Methuen praised all his men for their efforts.[28]

The advance of Lord Methuen's division had its successes, but inadequacies were rising to the surface. All the engagements had been costly in killed and wounded. At Graspan the Naval Brigade's officers were almost annihilated. At Modder River, four officers were killed and twenty were wounded. It became evident that officers could no longer strut around in their distinctive uniforms and flashing sabers.

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[26]Parsons, p. 8; The Times (December 5, 1899), p. 5.

[27]Parson, pp. 8-9.

[28]Amery, Vol. VII, App. III, p. 24; The Times (November 30, 1899), p. 5.

If they did, experience had shown that they could be singled out and killed or wounded by Boer sharpshooters. They had to conform in attire to the whole of the forces, or very soon the officer corps would be severely depleted.

The inadequate reconnaissance noted at the maneuvers before the war was again demonstrated at the Modder River engagement. Although the positions across the river were recognized, those on the near bank had not been adequately identified. Of course, the Boer camouflage reduced their possible discovery. With reconnaissance poor at best, long range reconnaissance was virtually absent. This was evident in the fact that Methuen was notified of the Modder River positions at 0500 hours that morning, and the engagement joined just thirty minutes later. Even though the British knew the Modder River Station was defended, the strength of the defense was not determined, and they were clearly surprised at Modder River. Methuen could only react to the situation rather than plan the action in depth.

The Royal Regiment performed excellently at Modder River, and they were the deciding factor in the engagement. Even though constantly within range of Boer small arms and artillery fire, they remained in position and continued to shoot. At one position along the front the artillery was within 400 yards of the Boer entrenchments.[29] This was well within the range of the Mauser rifle used by the Boers, and the British gunners obviously worked under a severe handicap. At times during the course of the battle, the British infantry was forced to seek cover when the Boer fire grew too intense, and this effectively denuded

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[29]Parsons, p. 8.

the artillery batteries. Still the gunners managed to keep up a continuous and accurate shrapnel fire. Prisoner interviews after the engagement remarked at the excellence and courage of the British gunners, and Lord Methuen singled out the artillery for particular praise. All were in accord with the Times, which voiced the opinion that "it was our superior artillery which won the day." Clearly the Boers had made a mistake of their own, and allowed the British guns to advance too close to their position. The resulting shrapnel fire at such a close range was extremely effective.[30]

After the fight at the Modder River, Lord Methuen established a temporary camp to await reinforcements. Meanwhile, General Buller in Natal continued preparing to make his advance to relieve Ladysmith. Training and building up his forces, General Buller was about to embark on his own offensive. In the center General Gatacre's smaller division was training and preparing to begin the offensive as well. The advances of Lord Methuen and the continued preparations of forces in other theaters contributed to a feeling of confidence, and morale was high within the army and at home. However, the confidence and morale were about to receive the first of three severe blows.

In the Cape Colony, General Gatacre made the decision to conduct a night attack against the Boers who held Stormberg Junction. It was a bold decision, because night attacks were historically difficult to accomplish and control. However, General Gatacre had spent the month of November training his detachment for the planned attack on Stormberg. On the night of December 9, employing 2,500 men and twelve

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[30] The Times (December 6, 1899), p. 5.

field guns, General Gatacre began his move against an equal force of Boers entrenched at Stormberg. Unfortunately, the British force, after becoming disoriented during the sixteen hour march, came under murderous fire from the Stormberg defenses. At daylight on December 10, a survey of the situation convinced General Gatacre he had to withdraw. Employing his artillery to cover the retirement, General Gatacre and his forces broke contact and departed the area in an orderly manner.[31]

The artillery was the only bright spot in the entire action, and they were credited with averting disaster by their prompt and accurate covering fire. However, disaster had not been totally avoided. The British lost fifty-seven killed, ninety-two wounded and 633 missing or captured at Stormberg. The night attack had been a brilliant idea, but its execution was poor. Inadequate reconnaissance and dependency upon native guides of questionable loyalty were blamed for the defeat.[32]

The loss at Stormberg Junction only signalled the coming of more severe failures. During the next six days two more repulses of British forces occurred, and so severe were these defeats to the morale and confidence of Great Britain that the press soon named the period "Black Week."

The next repulse came close on the heels of Stormberg Junction. In the west Lord Methuen's forces had been resting and refitting after the fight at the Modder River. The Boers for their part had been pre-

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[31] The Times (December 12, 1899), p. 9.

[32] Ibid.; Amery, Vol. VII, App. III, p. 24.

paring for the coming fight too. At Belmont and Graspan they had occupied the crests of the kopjes, but at their new position near the town of Magersfontein, they decided to entrench themselves along the bottoms of the ridge line south of the city. Their force amounted to 7,000 mounted troops and 4,000 infantry with thirteen guns. They occupied the kopje chain that extended west to the DeAar-Mafeking Railroad and east to the Jacobsdal Highway. From that point the Boers extended their trenches beyond the hills in a southeasterly direction and anchored their left flank on the north bank of the Modder River. The trench system was elaborate with overhead cover provided in most cases, and as had become their habit, the entire area was extremely well camouflaged.[33]

Methuen's forces had been substantially increased during his halt at the Modder River Station. On the eve of the engagement the First Division consisted of three brigades of infantry composed of thirteen battalions, one cavalry brigade with two squadrons of lancers and a battalion of mounted infantry and scouts. The artillery was increased as well and consisted of "G" battery Royal Horse Artillery, the 18th, 62nd and 75th batteries, Field Artillery and two 4.7-inch naval guns. The 65th Field Artillery howitzer battery was enroute to the Modder River Station on December 9. Its arrival the next day increased the number of British guns to thirty-two, including six 12-pounders, eighteen 15-pounders, six 5-inch howitzers, and two 4.7-inch naval guns.[34]

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[33]G. F. MacMunn, "Concerning the Field Howitzer," Proceedings of the Royal Artillery Institution, XXIX (1903), pp. 313-314; Parsons, p.9.

[34]Waters, p. 240.

Since the Boer position was approximately eight kilometers from Modder River Station, the opportunity for extensive reconnaissance was readily available. Unfortunately, Lord Methuen failed to take full advantage of the opportunity. The ends of the Boer line had not been determined, and the fighting positions were thought to be on the crests of the kopjes. On December 9, Methuen ordered one naval gun to generally bombard the position, and the next day all guns were brought forward to add their fire to the kopjes. Using the inadequate reconnaissance, all the fire was directed at the heights and the reverse slopes of the kopje chain. The fire was kept up for several hours, sweeping the hills with what one observer called "damnable accuracy." Upon the approach of darkness finally the British guns ceased firing, but the effort was wasted on target locations that were not the Boer positions.[35] Its reported accuracy was probably factual in that the artillery hit what they had been told to engage, but they were aiming at phantoms. Importantly, the Boers refrained from returning the British cannon fire. Even though the British artillery bombardment was a reconnaissance by fire to elicit a response and thereby locate a profitable target, the Boers steadfastly refused to oblige. Like their infantry at the bottom of the hills, the Boer guns were entrenched, covered and camouflaged in defilade, and they were virtually untouched by the British gunners. Safe in their covered trenches, the night's rest prepared them for the ordeal the next day.[36]

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[35] MacMunn, p. 314.

[36] U. S. War Department, Office of the Chief of Staff, Second (Military Information) Division, Selected Translation Pertaining to the Boer War, p. 158.

The next morning, the advance to the attack position began before dawn. The Boers, however, were not surprised and were fully prepared for the expected onslaught. On the right, the Highland Brigade, advancing on a narrow front and in a deep column, was engaged by Boer riflemen and turned back before they could deploy in skirmishers and get into assault position. On the left, the Guards Brigade was advanced forward, but it too was repulsed. The Boers had yet to fire their artillery, and succeeded in inflicting severe casualties by intensive rifle fire alone. Methuen moved the field artillery batteries within 1,100 yards, but its shrapnel proved ineffective against the well-covered Boer trenches. Late that afternoon, the Boer artillery opened fire for the first time. They directed their shrapnel at the badly shaken Highland Brigade, which had been removed from the right flank and placed in the center of the British line. Totally surprised by the hostile artillery, some elements of the brigade bolted and withdrew behind their own artillery batteries, leaving them exposed and unprotected. It fell to the artillery to absorb the punishment of rifle and artillery fire, with no opportunity to withdraw. It was much easier and more effective to continue firing shrapnel at the Boer position, than expose both men and horses in an attempt to limber the guns and withdraw.[37]

The fighting continued very active for most of the day, but Methuen's division was unable to take the position. By late evening, the shooting had stopped, and by tacit agreement, the British and Boers policed the battlefield, removing the wounded and burying the

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[37]Ibid., pp. 159-161.

dead. With the gunfire falling silent, the baggage train and ammunition column was ordered to return to the Modder River Station. Shortly thereafter, the remainder of the British force took up the march to the rear.[38]

Magersfontein was a serious defeat for the British, and losing 240 killed, 651 wounded and seventy-six missing or captured made it disastrous compared to other previous engagements.[39] The most obvious cause of the defeat was inadequate reconnaissance. This shortcoming yielded poor target acquisition information and in turn caused the artillery to direct their preparatory fires at non-existent positions leaving the real locations untouched. The bombardment became a reconnaissance by fire, and that was a poor substitute at best. Unlike the engagement at Modder River, Methuen had almost two weeks to perform a thorough, painstaking reconnaissance, but he had failed to do so. Whether this was a conscious failing cannot be adequately determined, but the fact remains that decisions regarding deployment of forces and tactics employed were based upon inadequate information.

The artillery preparation fired on the day preceding the assault was a wasted effort. Not only was it directed at assumed locations that were not factually identified, but also the absence of any coordinated offensive action by maneuver elements in its wake negated its effect. The delay during the night of December 10, allowed the Boers to rebuild any destruction as well as recover from the morale effect of the bombardment. Without immediate offensive action in

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[38]Waters, pp. 109-110.

[39]Amery, Vol. VII, App. III, p. 24.

conjunction with artillery fires, the preparation alone was ineffective. Without maneuver elements functioning in concert with artillery, the abyss of disaster opened wider. The idea that artillery was an assault force rather than a support element seemed to be followed. It was apparent that the artillery was expected to so stun the enemy that the infantry advance would be an easy afternoon stroll. Obviously too much was expected.

Finally, the high hopes for lyddite had not proven as devastating as had been expected, and shrapnel shell against covered positions was virtually useless. Lyddite functioned well against buildings, destroying them easily, but in open terrain and surface targets its effect was too local, causing only a crater in the soil and little or no fragmentation.[40]

All things considered, the defeat at Magersfontein was due entirely to poor reconnaissance, and a lack of initiative on the part of General Methuen to obtain complete information. Obviously this shortcoming, which had been identified in peace time, was due to poor training in the art, but General Methuen as commander must shoulder some of the responsibility for failing to demand more complete information from reconnaissance. The defeat at Magersfontein caused one soldier to write, "we have been out, we have fought our battle....and we have returned vanquished.... The general--Paul Methuen--whom we all expected to do so much, has lost the confidence of everyone."[41]

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[40]MacMunn, p. 314; N. B. Inglefield, "Some Remarks on the Royal Artillery in the War in South Africa, Chiefly with Reference to Heavy Guns in the Field," Proceedings of the Royal Artillery Institution, XXIX (1903), p. 505.

[41]The Times (January 16, 1900), p. 6.

This was probably an isolated opinion, but undoubtedly the defeats at Magersfontein and Stormberg were severe blows to the confidence of the British soldier, who had never truly confronted defeat in forty years. Clearly, the week was getting darker, and soon it would be black.

The same day Methuen engaged the Boers at Magersfontein, Buller's full complement of forces was assembled at Chieveley Camp, a few miles south of Colenso and the Tugela River. Four brigades of infantry numbering 16,000 men and a composite mounted infantry and cavalry brigade of 2,600 men composed the maneuver elements. In support were the 7th, 14th, 63rd, 64th and 66th Field Artillery batteries. Additionally, Captain Scott's makeshift gun carriage factory had been busy since October, providing two 4.7-inch guns and fourteen long range naval 12-pounders to Buller's growing force. It was, needless to say, a formidable force.[42]

Opposing the British were General Louis Botha and a force of 5,000 men and five guns, who were determined to hold the line along the Tugela River. Painstakingly, they had entrenched and camouflaged positions along the north bank of the river from Red Hill in the west to a hillock named Fort Wylie on the east. Furthermore, they had occupied a lone kopje, called Hlangwane Hill, which was situated on the British side of the river, east of Fort Wylie.[43]

On December 15, after the heights across the Tugela River had been continuously bombarded by the naval guns for two days, Buller began

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[42] The Times (January 17, 1900), p. 4.

[43] U. S. War Department, Office of the Chief of Staff, Second (Military Information) Division, Selected Translations Pertaining to the Boer War, p. 149.

his attack. Using a three brigade front and a cavalry regiment screening the right flank, the British advanced in the quiet of the early morning. The Fifth Brigade with the 63rd and 64th Field Artillery batteries on the left had the mission to ford the Tugela River approximately three miles west of Colenso. The Second Brigade in the middle supported by the 14th and 66th Field Artillery batteries along with six naval 12-pounders was given the Colenso bridge as an objective. On the right, the Sixth Brigade and the cavalry regiment were to advance against Hlangwane Hill, which enfiladed the surrounding kopjes on the north bank of the river.[44]

On paper the plan appeared comprehensive, but almost as quickly as the engagement began, disaster struck. Just after daybreak the 14th and 66th batteries, supporting the Second Brigade moved into a position 800 yards short of the Tugela River and east of the town. The two batteries were only 1,200 yards from Fort Wylie, and almost one mile ahead of the infantry brigade they were designated to support. They were obviously unprotected by any escort elements. The target was too tempting, and immediately the Boers began a murderous small arms fire directed at the two batteries, which were caught in the open, not yet unlimbered or prepared to fire. The small arms fire immediately took a heavy toll in gunners and horses.[45] Soon, Boer artillery from positions near Fort Wylie were brought to bear on the stranded guns and gunners. However, the British gunners still managed to unlimber and engage the Boers, but the courageous effort was for naught. Soon

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[44]The Times (January 17, 1900), p. 4.

[45]Ibid.

nearly all the men and horses were killed and the guns were abandoned.[46]

Meanwhile, the Fifth Brigade on the left had come under heavy fire from Boers on Red Hill and Grobler's Kloof, where two Creusot Long Toms were positioned. The Boer artillery was creating havoc, and the rifle fire from positions along the river bank was terrifying. To add even more to the terror the Boers were so well concealed that "not a single head was even visible." The battlefield consisted of "nothing but a long line of smoke, scarcely visible, and the incessant roar."[47]

The naval guns engaged Fort Wylie in an effort to extract the 14th and 66th batteries, and the Fifth's brigade division could not range the Long Tom positions. In view of these two nearly simultaneous disasters, Buller ordered a retirement at 1030 hours. Unfortunately, elements of the Fifth Brigade, which had advanced to the river bank, were pinned down and unable to comply with the order. They along with ten 15-pounders of the 14th and 66th batteries were captured.[48]

On December 15, the action at Colenso ended Black Week. Three definitive defeats had been handed the British and their offensive had stalled. The relief of Kimberley, Mafeking and Ladysmith was in doubt. At Colenso, the experience at Magersfontein was repeated. Buller had the heights bombarded for two days, but the Boers had cautiously refused to reply, keeping their artillery concealed. "We had no idea

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[46]U. S. War Department Adjutant General's Office, "Extracts from the Reports of Captain S. L'H. Slocum, Eighth Cavalry, on the Operations of the British Army," Reports on Military Operations in South Africa and China, 1901, p. 14.

[47]Ibid., p. 12; The Times (January 17, 1900), p. 4.

[48]Ibid.; U. S. War Department, Office of the Chief of Staff, Second (Military Information) Division, Selected Translations Pertaining to The Boer War, p. 149.

where it [the Boer artillery] was until the battle was begun," explained one British officer.[49] The Boers also refused to occupy the crests of the kopjes, and just as they had done at Magersfontein, the burghers had dug covered and camouflaged trenches along the base of the mountains. Since the Boers were not replying to his bombardment, Buller apparently assumed they had no artillery, and that the Boers were not inclined to defend the position in strength.[50]

The eagerness of the 14th and 66th batteries resulted in their pushing too quickly and too far in advance of the Second Brigade. They essentially outran their own security in their haste to occupy a favorable firing position. Obviously, coordination between infantry and artillery elements had not been thoroughly effected. The zeal displayed was admirable, but it was rewarded by annihilation before they were in position to defend themselves.[51]

Reconnaissance at Colenso was obviously lacking, but moreover, the importance of camouflage and deception to frustrate reconnaissance efforts was vividly portrayed. Camouflage, combined with weapons using smokeless powder, contributed to the success of the hidden Boers, and the combination markedly affected target acquisition and troop morale. The Boers had proven themselves masters of the art of concealment, and as one observer stated, "....scarcely a man who fought in the fight.... can say with truth that he saw a Boer."[52]

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[49] C. Holmes Wilson, "The War: The Artillery at Colenso," Journal of the United States Artillery, XIII (1900), p. 12.

[50] The Times (January 17, 1900), p. 4.

[51] Wilson, "The War: The Artillery at Colenso," p. 193.

[52] Ibid., p. 192.

The Boer artillery easily ranged the British guns, but except for the naval guns which concentrated on Fort Wylie, the British field pieces could not reach the Boer positions. The Boer pieces, in addition to the Long Toms, were Creusot 14-pounders, which claimed a shrapnel range to 4,500 yards and a maximum range of 8,700 yards. Some Boer shrapnel shell had been found fused for 5,200 yards.[53] The British field pieces were effectively out-ranged 1,000 yards. Fortunately for the British, however, a large number of Boer shrapnel rounds had failed to burst and this factor, solely by accident, saved the British from suffering even more casualties. For military authorities, the prospects were sobering, assuming the Boers had attempted to obtain a more efficient fuse.[54]

At Colenso the long range guns had come of age. Natal and the Cape Colony possessed terrain and climatic conditions that were particularly adaptable to the use of long range guns.[55] The wide rambling plains dotted by butte-like kopjes which commanded the surrounding terrain, coupled with an unusually clear atmosphere which extended the observation distance, was most suited to the long range guns. One observer noted that at Colenso the Boers could observe "every movement on the plain below....even stones were clearly visible on the ground." Another officer warned his troops of the "excessive clearness" of the

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[53]Godfrey L. Carden, "British and Boer Guns: A Lesson from the South African War," Journal of the United States Artillery, XIII (1900), pp. 200-201.

[54]Wilson, "The War: The Artillery at Colenso," p. 193.

[55]Ibid.

African air, and a gunner described the air as "exquisitely clear."[56] It was excellent country for long range guns, and the British were not prepared for their employment.

Aside from the presence of long range guns in South Africa, the Boers' ingenious use of camouflage, coupled with smokeless weapons were the crucial points in the losses suffered by the British. The notable failures in reconnaissance throughout the campaign was a glaring fault in the British Army in all theaters. Its failure inevitably led to failure on the battlefield. The poor information derived from inadequate reconnaissance caused equally poor tactical decisions to be made, and it further allowed artillery to expend countless rounds on would-be targets. The failure of the artillery preparatory fires at Magersfontein and Colenso was due primarily to poor target acquisition, reconnaissance and failure to take immediate offensive action in conjunction with the artillery fires. The lack of coordinated effort on the part of all elements effectively cancelled each other's efforts.

For the Royal Regiment, however, the courage and audacity of the gunners was unsurpassed, and tangibly they were credited with the successes at Talana Hill, Elandslaagte, Modder River and the Stormberg withdrawal. Clearly, if the Regiment had been less successful, all engagements could have easily been disasters. However, the Boers had demonstrated the importance of quick-firing guns. Although their fire

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[56] C. Holmes Wilson, "Tactics: With the Artillery in Natal," Journal of the United States Artillery, XV (1901), p. 198; Waters, p. 250; Erskine Childres, In the Ranks of the C. I. V.: A Narrative and Diary of Personal Experiences with the C. I. V. (Honourable Artillery Company) in South Africa (London: Smith, Elder and Company, 1901), p. 61-62.

was predominately ineffective physically, the volume of fire at its extended ranges had considerable effect upon the morale of British troops. Undoubtedly, the range limitations of the British 12-pounder and 15-pounder field guns were defects that had to be corrected. It should be noted, however, that the British field guns were not designed to engage siege guns, and their range limitations were more notable when they were forced to engage the mobilized big guns possessed by the Boers. The longer range of small arms, which were capable of engaging the enemy at ranges in excess of 1,000 yards and making the advance more hazardous for all elements, also complicated the achievement of complete fire support. The lack of concentration of artillery fires at the decisive point and time further complicated overall British efforts, and clearly demonstrated a lack of coordination as well as poor understanding of the Regiment's capabilities. For the British, the importance of improved reconnaissance and swift tactical employment to cope with the craftiness and mobility of the Boers was uppermost. To achieve success demanded leadership and ingenuity in employment of all forces, including the artillery. In the meantime, the Royal Regiment was capable of fabricating interim longer ranged guns and a limited number of quick-firing pieces to balance the scales.

CHAPTER IV

THE OFFENSIVE

Tactically, insufficient reconnaissance and the presence of Boer long range guns were the significant features affecting the Royal Regiment's participation during the first phase of the war. Strategically, Buller's decision to split his forces into three columns effectively diffused the necessary preponderance of forces required to generate an offensive. The results were explicit. The British were capable of tactical advance, but they did not possess sufficient military power to generate a strategic offensive that would compel the Boers to enter a retrograde movement and redistribute their forces. In the end, the limited forces coupled with the inherent weaknesses in training and preparedness led to disaster, culminating in Black Week.

The second and decisive phase of the war, however, illustrated opposite characteristics of the first period. The appointment of Lord Roberts as commander in chief on December 18, and the injection of large numbers of troops soon gave the British the strategic edge. By February, 1900, they launched a strong offensive. Tactically, Roberts adopted the employment of infantry in widespread extended lines, avoiding concentrated formations of troops. For the artillery, the new widespread tactics demanded that mobility remain an integral part of their participation, but moreover, the experiences of the first phase of the war required the Regiment to dismount guns of position from their

parapets and make them mobile as well. The presence of garrison guns in concert with the smaller field guns complemented each other on the battlefield and gave new flexibility to the commander. The offensive period from February, 1900, to the occupation of Pretoria in June, 1900, demonstrated the effects of coordinated efforts between artillery units and maneuver elements. Furthermore, the offensive period clearly demonstrated the Regiment's ability to adapt to the situation and modify its employment methods.

For the Boers the offensive was the beginning of the decisive act of the war, and according to some Boer prisoners taken later in the conflict, they "dated their debacle from Roberts' arrival, and the use of flanking movements with large numbers of men."[1] Finally, the offensive compelled those more recalcitrant Boers to take to the hills and indulge in a guerrilla war of sorts, that held no hope of success. Clearly, the Boers were on the altar of defeat after the first engagement of the offensive.

The first confrontation of major importance occurred only six days after the offensive began on February 11, 1900, and it was in the end the decisive engagement of the entire war. After carefully and secretively assembling three infantry divisions, a cavalry division, two brigades of mounted infantry and ninety-two guns in the vicinity of Graspan, Roberts put his plan into action. The scheme called for Lord Methuen and his veteran 1st Division to maintain their positions at Magersfontein, and hold the Boers' western theater commandant, Piet Cronje, and his 7,000 troops in position. While this diversion was

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[1]Childers, p. 118.

being carried out in conjunction with other similar activities conducted by independent elements around Colesberg and Stormberg, Roberts planned to move his force east paralleling the course of the Riet River to Jacobsdal, and then turn abruptly north.[2]

On February 13, the cavalry division under the command of General John French turned north about five miles east of Jacobsdal, crossed the Riet River, and advanced to the Modder River. The next day at about 0900 hours, the cavalry division, having been joined by the 6th Infantry Division at the Modder River, departed west to relieve Kimberley, arriving there the next day.[3]

Cronje was apparently surprised when he began receiving reports that British elements in addition to Methuen were crossing the Riet River. When on February 16, he was informed of the presence of the British cavalry in Kimberley he ordered a withdrawal of all his forces to Bloemfontein, the Free State capital.[4] He had waited too long, however, and on February 17, while resting his force near Paardeberg he found himself cornered in the bed of the Modder River by French's cavalry division, which had moved into position northeast of the Boer encampment. French, with two batteries of Horse Artillery, immediately engaged the Boers at 3,300 yards. Although it was a British

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[2]U. S. War Department, Adjutant General's Office, "Extracts from the Reports of Captain S. L'H. Slocum, Eighth Cavalry, on the Operations of the British Army," Reports of Military Operations in South Africa and China, 1901, pp. 22-25.

[3]Ibid., p. 25. "The weather was extremely hot, about 110°, in the shade, and there was no time to water mounts." J. E. Caunter, "From Enslin to Bloemfontein with the 6th Division," The Royal United Service Institution Journal, XLIV (1900), p. 1144.

[4]Parsons, p. 14.

trap, precariously French was alone at the time, and the reinforcing infantry divisions were still some distance away. Moreover, French's movement beginning early in the morning of February 17, had covered nearly twenty miles in half a day and his mounts were spent.[5]

Cronje apparently thought he could storm the position and break out or at least escape the trap. However, the Royal Horse Artillery batteries were within their efficient shrapnel range and they succeeded not only in repulsing the attacks by the now desperate Boers, but also, covered escape attempts with their deadly fires. The Boers on the other hand received a taste of their own tactics and found that frontal attack was just as difficult for them as it had been for the British only two months earlier. During the course of events of February 17, however, French undoubtedly kept a concerned and watchful eye on the southern horizon, hoping the infantry divisions would arrive before the prize he had trapped succeeded in one of their assaults.[6]

The wait was longer than French had expected, perhaps, but by 1700 hours that evening the first elements of the 6th Division arrived and later the full division closed near the Paardeberg laager at 2130 hours. By 2300 hours the 9th Division had closed along with two brigades of mounted infantry, and they began completion of the encirclement of the

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[5]Waters, pp. 162-164. "He [French] had left Kimberley about 4 a.m. .... In spite of the great heat and notwithstanding the fact that no water was to be found during the march, he reached Kameelfontein [northeast of the Boer column] towards 11 a.m."

[6]Ibid., pp. 164-165.

Boer position.[7]

The next morning the British found the Boers deeply entrenched in the river bed. Apparently, harkening back to the success at Magersfontein, Cronje had decided to defend the camp. Lord Kitchener, chief of staff to Lord Roberts, arrived at the scene and began directing operations. Unfortunately, ignoring the tragic lessons of Magersfontein and Colenso, Kitchener began ordering various assaults on the Boer defenses. The results were predictably unsuccessful, and by the end of the day 212 British were killed and 932 were wounded.[8]

The next morning, February 19, Roberts departed his headquarters at Jacobsdal, and arrived at the encirlced Boer camp at 1030 hours. He quickly called a halt to any further assault attempts and communicated to Cronje an immediate demand for his surrender. Initially, the Boer general seemed to agree, but at 1515 hours, as British elements began moving toward the Boer laager under a flag of truce to accept prisoners, the Boers opened fire. Shortly thereafter, Roberts received Cronje's rejection advising the British general that, "if you wish to bombard, fire away."[9]

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[7]U. S. War Department, Adjutant General's Office, "Extracts of the Reports of Captain S. L'H. Slocum, Eighth Cavalry, on the Operations of the British Army." Reports on Military Operations in South Africa and China, 1901, pp. 27-28.

[8]Ibid., p. 31; Parsons, pp. 14-15; Amery, Vol. VII, App. III, p. 24. Total British casualties for the ten day operation at Paardeberg were 348 killed, 1133 wounded, and fifty-eight missing. Obviously, the vast majority of casualties suffered by the British in the action were the result of Kitchener's questionable decision to assault the entrenched Boers during the activities on February 18.

[9]U. S. War Department, Adjutant General's Office, "Extracts of the Reports of Captain S. L'H. Slocum, Eighth Cavalry, on the Operations of the British Army," Reports on Military Operations in South Africa and China, 1901, p. 29.

Cronje's decision set the stage for the British artillery's first opportunity to concentrate its fires. On the north side of the Boer camp, one 5-inch howitzer battery, three 4.7-inch and one 12-pounder naval guns, and three batteries of Field Artillery were positioned. On the south were one 4.7-inch and three 12-pounder naval guns, and three Field Artillery batteries. French's Horse Artillery batteries remained in place northeast of the laager. Roberts went further to facilitate the bombardment by issuing an order on February 20, stipulating that all batteries would be ordered to fire only by himself or Lord Kitchener. The only exception to the rule were those actions taken to defend a position or in a prearranged assault.[10] While the bombardment was being conducted, infantry elements began digging trenches around the Boer embattlement, and nightly the trenches were progressively advanced nearer and nearer the hostile laager.[11]

The siege at Paardeberg Drift lasted from February 20, through February 27; however, the artillery bombardment plan that seemed to promise concentrated fire was not fully accomplished. On the first day of shelling, February 20, all guns began firing at 0600 hours, but on the next day, the British were concerned with a relief attempt by other Boer elements against the southeast quadrant of the British cordon. On February 22, the artillery fired only occasionally on the trenches and wagons. The next day another Boer relief column was repulsed with the burghers losing 154 killed and wounded and 102 captured. The artillery, in the meantime, shelled the laager at

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[10]Ibid., p. 63.

[11]Ibid., p. 31.

"irregular intervals" that day. On February 24, there was little firing again, but the British did discover the Boer ammunition wagons, which the 4.7-inch guns quickly exploded. The following day was Sunday, and there was no firing. On February 25, three Vickers-Maxim 12½-pounder quick-firing guns manned by the City of London Imperial Volunteers [C. I. V.] arrived along with four 6-inch garrison howitzers. At 1630 hours General French fired his Horse Artillery batteries continuously for an hour.[12]

Early in the morning of February 27, the Royal Canadians on the north advanced the British trenches to a point ninety yards from the Boer lines. This fact combined with the Boers consuming their last ration the day before and the presence of the 6-inch howitzers which had fired upon the Boers shortly after arrival, apparently convinced the Boers to surrender. General Piet Cronje and 4,010 Boers surrendered to the British, and the decisive battle in the western theater had been fought.[13]

It was sweet victory for the British, because as one observer noted, "Cronje had thrown up the sponge.... and it was the dawn of the nineteenth anniversary of Majuba!"[14] Although the surrender of Cronje at Paardeberg Drift was the decisive victory in the protracted phase of the Boer War, and only splintered resistance could subsequently be mounted by the burghers, the conduct of the bombardment

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[12]Ibid., p. 33-36.

[13]Ibid., pp. 36-37.

[14]Caunter, p. 1149. The British had suffered a resounding defeat at the hands of the Boers at Majuba Hill in Natal on February 27, 1881, and at the beginning of the Boer War "Remember Majuba" was a popular rallying cry.

cannot be considered a total success. By the end of the bombardment, ninety-eight guns were present and all were positioned within easy range of the laager. The British, however, as illustrated in the course of events, only concentrated all their guns on the first day of the bombardment. The distractions by Boer elements attempting to relieve the besieged camp were capably handled by the Mounted Infantry and Horse Artillery batteries, and they did not substantially drain that much fire power away from the whole force. The captured Boers voiced no fears of lyddite; however, a continuous bombardment by the eighteen big guns capable of using the shells that were at Roberts' disposal, although not creating much physical damage, undoubtedly would have been unnerving.[15] Furthermore, there apparently was no difficulty in supply or security of the supply lines. Illustrative of this conclusion was the fact that 100 ration and supply wagons arrived at the British position on February 21.[16] Therefore economizing was not the excuse for the reduced fire. All things considered, every thing necessary to concentrate the fires decisively was present, and failure to do so conceivably extended the siege.

On the other hand, there were several important positive features that were revealed at Paardeberg. Mobility was exemplified to the fullest by French's two Horse Artillery batteries in the march from Kimberley to Paardeberg. His horses were absolutely spent when he discovered the Boers, and Cronje could have outrun the British had he

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[15]Ibid., p. 1150.

[16]U. S. War Department, Adjutant General's Office, "Extracts of the Reports of Captain S. L'H. Slocum, Eighth Cavalry, on the Operations of the British Army," Reports on Military Operations in South Africa and China, 1901, p. 33.

known it. His attempts to assault the cavalry, however, were repulsed by the Horse Artillery and the dismounted cavalry troops, who apparently found a use for their rifles. Cronje's escape attempts were equally halted by effective shrapnel fire of the Horse Artillery batteries. Their successful employment was the key to confining and holding the Boer force in the river bed until additional forces arrived to close the circle.

Other positive features included the arrival of three Vickers-Maxim 12½-pounders, and although limited in number, they indicated that some effort was being made to provide newer field guns.[17] The presence of the 6-inch howitzers mounted on a fabricated and impromptu mountings and towed by teams of oxen numbering more than twenty-four in some cases, also indicated that the Regiment was prepared to adapt to the situation in South Africa. Notwithstanding the excellent service rendered by the naval guns and crews, all three elements of the Royal Regiment, the Royal Horse, the Royal Field and the Royal Garrison Artillery were present on the mobile battlefield, and this gave more flexibility of response and easier coordination to the

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[17] Childers, p. 28. The C. I. V. returned to England in October, 1900, and since the Vickers-Maxim battery was composed of only four of the guns, there limited employment correspondingly reduced any substantial conclusions concerning their future use.

commander.[18]

An excellent example of the flexibility afforded by the presence of all three elements of the Royal Regiment was provided by General Buller's forces operating in Natal during the same time frame as Roberts' offensive in the western area. Buller, in January, was still based at Chieveley Camp and stubbornly, he was still attempting to cross the Tugela River to gain access to Ladysmith. In late January, he had attempted to turn the Boer western flank, but he was repulsed at an action near Spion Kop on January 25. Still determined to turn one or the other Boer flanks and cross the Tugela he directed his attention to the Boer left flank, east of Colenso.

General Louis Botha, commander of the Boers in Natal, had established a strong position in that area as well. The Boer lines extended from a westernmost point at Groblers Kloff, east across the Tugela River along Hlangwane Hill to a kopje named Monte Cristo. Unfortunately, the line had a weakness. The Tugela River cut the

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[18]T. C. Goff, "Short Description of the Improvised Travelling Carriage for 6-inch, Q. F. Guns," Proceedings of the Royal Artillery Institution, XXIX (1903), pp. 158-160. Even though the author described the carriage as "improvised," it was remarkably well-suited for movement in South Africa. The 6-inch gun and cradle were mounted to a "top carriage" which in turn was bolted to a "slide." When in firing position, the gun and "top carriage" rested squarely on the two front carriage wheels, with the "slide" functioning as the gun trail. On the move the "top carriage" and gun were moved to the center of the "slide" and a travelling limber was hitched to the end of the trail. In this configuration, the 6-inch gun distributed its weight equally on the two wheels of the limber and those of the carriage. The improvised carriage allowed the heavy gun to move easily as well as avoid becoming struck as frequently as was the case with other big guns. N. B. Inglefield in "Some Remarks on the Royal Artillery in the War in South Africa, Chiefly with Reference to Heavy Guns in the Field," Proceedings of the Royal Artillery Institution, XXIX (1903) p. 504, criticizes the 4.7-inch garrison gun carriage for is imperfect balance, noting that "over four tons are taken on two wheels." In this condition he adds that the gun easily became bogged down, and had been known to "sink to its axle tree and even further."

position in half between Groblers Kloff and Hlangwane Hill, and Buller decided to gain possession of Hlangwane Hill, which enfiladed the Boers on the opposite bank of the Tugela.[19] In preliminary movement to conduct his planned operation, Buller on February 15, ordered five naval 12-pounders and two newly arrived mobile 5-inch garrison guns, manned by the 6th Southern Garrison Artillery Company, to occupy a position on a low lying hill south of Monte Cristo.[20]

The next morning, the big guns began a bombardment of the Boer trenches, which brought an immediate response from a Boer 40-pounder that could not be observed. However, the response was negated by employment of the Boer tactic of entrenching and covering gun positions. On February 17, the bombardment began again and this elicited a response not only from the hidden 40-pounder, but a Long Tom spoke as well. Unfortunately for the Boer gunners, the Long Tom used smoke powder, and sixteen British big guns quickly engaged the Boer gun and silenced it.[21]

The following morning, February 18, the infantry stormed up the east side of Monte Cristo. The 5-inch guns, now four in number, along with the naval guns opened fire at 8,000 yards on preplanned targets beyond the crest of Monte Cristo, where supposedly encampments and trenches were located. In the meantime, howitzers worked over the

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[19]Wilson, "Tactics: With the Artillery in Natal," p. 199.

[20]C. E. Callwell, "A Heavy Battery at the Relief of Ladysmith," Proceedings of the Royal Artillery Institution, XXVII (1901), p. 137.

[21]Ibid., pp. 139-140. "A visit to the emplacement....showed that the practice [British term for firing] at it had been very accurate, and from the appearance of the ground, and the smell, it looked as if some of the detachment had stopped there for good."

forward slopes of the hill. By arrangement, the artillery fire ceased after forty-five minutes of continuous shelling. The results were immediate, and the Boers began withdrawing to the Tugela as the British infantry advanced up the hill. The decision to make the withdrawal was a costly one for the Boers. In their haste to reach the safety of the Tugela River, they were forced to pass directly in front of prepositioned field batteries who quickly and efficiently brought very effective shrapnel fire to bear on the exposed Boers.[22]

Three days later on February 21, the British were in possession of Hlangwane Hill, and they spent the next five days trying to establish a defensible bridgehead across the Tugela. Finally, on February 27, the same day Cronje capitulated to Roberts, the final act to secure the bridgehead and clear the Colenso area of Boer resistance occurred. A strong Boer position on Pieters Hill, lying north of Hlangwane Hill, across the Tugela River, and overlooking the road to Ladysmith was the objective. Seventy guns, varying in size from the small 2.5-inch mountain gun to the huge 5-inch garrison gun were assembled on Hlangwane Hill forming "one great battery." There were so many guns, in fact, that some were double tiered on the hillside, and all were threateningly aimed at Pieters Hill.[23]

The operation commenced by a slow and occasional firing of the artillery, as three infantry brigades cautiously advanced to positions

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[22] Ibid., p. 140.

[23] Ibid., p. 142. "The artillery consisted of one horse artillery battery, six 15-pounder field batteries, one howitzer battery, one mountain battery, and my four guns [5-inch garrison guns]. Besides these there were four naval 4.7-inch guns....and....eight naval 12-pounder Q. F.'s."

in the river bed. Finally, when all elements were in position, the massed artillery began firing lyddite and shrapnel with ferocity. As the infantry advanced on the hill from three directions in widespread skirmishes, the artillery increased its rate of fire, until the last moment before the final assault began. At that moment the artillery by prearrangement ceased firing, and the infantry easily stormed the position. The next morning the Boers were observed in retreat, and elements of Buller's cavalry arrived at Ladysmith, raising the siege.[24]

Although it may be suggested that Cronje's fall on February 27 made it easier for Buller's troops to take Pieters Hill on the same day, it was equally true that Buller's activity contributed to Cronje's downfall. By occupying the attention of Boer elements in Natal, Buller eliminated the possibility of strong relief columns being dispatched to the western theater. This was in marked contrast to the disjointed and independent actions of the first phase of the war.

From an artillery point of view, Buller's employment of the 5-inch garrison guns in a well-coordinated and prearranged engagement successfully pushed the Boers from Monte Cristo and later across the Tugela. More importantly, all his guns were employed efficiently. The big guns fired lyddite at long range targets, the howitzers were employed on closer range trenches, and the field guns fired their shrapnel on exposed troops, precisely as they were designed to do. In the wake of the fires came the infantry, who successfully expelled the enemy. Later at Pieters Hill, similar coordination and efficient employment was made of artillery assets by Buller, and close fire support of

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[24]Ibid., p. 142; Coxhead, p. 563.

maneuver elements was achieved.

In both theaters examples of the Regiment's ability to provide support were illustrated, and the results of coordinated effort were immediate. The surrender of General Cronje and 4,000 veterans was a crushing blow to the morale of the Boers, as well as a decisive blow to their ability to wage protracted combat. Equally, the relief of Kimberley and Ladysmith boosted the morale of the British and added more troops to the British in the field and along lines of communication. Most importantly, the British had penetrated the enemy's homeland and that augured ill for the Boers and their continued resistance.

The Boers on the other hand, were not willing to give up without a fight. In the western theater, Roberts continued his advance eastward toward Bloemfontein after a week's respite around Paardeberg. The first attempt at resistance was made at a small village on the Modder River known as Poplar Grove. Roberts quickly dispatched French's cavalry division to turn the Boer right flank, and he sent the 7th and 9th Division on similar turning movements to the Boers' left. In the center, the Guards Brigade and massed artillery advanced toward the position. Unwilling to suffer a similar fate as Cronje, the Boers quickly withdrew toward Bloemfontein.[25]

Roberts continued the advance on March 9, and the army marched to a kopje chain known as Abraham's Kraal, arriving at mid-morning on March 10. On the left the 6th Division was confronted by strong Boer positions along the Kraal, and in an attempt to turn the flank of the position, the British were met by other Boer elements barring their

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[25]Caunter, p. 1153.

path. A few rounds of shrapnel caused the Boers to immediately fall back to stronger positions in the rear. The battle narrowed down to the cavalry division and the 6th Division, who were more severely engaged than the rest of the army. On a limited scale the British attempted to flank the position. The Boers, apparently observing the enveloping movement, tried to engage French's cavalry with their artillery, but the range was too great for effective shrapnel fire.[26] Undaunted, a British infantry regiment advanced to a center hillock, while another regiment occupied the enemy's left. A third regiment was drawn in and sent around the left to flank the position. The third occupied commanding terrain, and after establishing a superiority in rifle fire and inflicting considerable damage by well-directed shrapnel fire, the regiment on the enemy's left fixed bayonets and rushed the retiring Boers.[27] The British lost eighty-two killed and 342 wounded in the assault at Abraham's Kraal. The next morning, however, the British discovered 102 Boer bodies left behind by the retreating burghers.[28] Clearly, the Boers had suffered more in the defense of the position than they had experienced before in the war, and above all, they were on the run.

Roberts rested portions of his army the next day, while his caval-

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[26] Ibid.

[27] U. S. War Department, Adjutant General's Office, "Extracts from the Reports of Captain S. L'H. Slocum, Eighth Cavalry, on the Operations of the British Army," Reports on Military Operations in South Africa and China, 1901, p. 45.

[28] Amery, Vol. VII, App. III, p. 24; Caunter, p. 1153.

ry division and the 6th Division continued to press toward the Boer capital.[29] There was no resistance to speak of and on March 13, Roberts at the head of his columns entered the Orange Free State capital unmolested.

Offensive operations in the western theater were curtailed for several weeks after the occupation of Bloemfontein, as Roberts began a pacification program, reconnoitered the area east and north of Bloemfontein, and continued to build up his army. The Boers, however, had decided to take the fight to the British. On March 18, at Kroonstad in northern Orange Free State, a council of war was held which concluded that purely defensive tactics had failed to serve them well. It was decided that a vigorous offensive of harrassing attacks and quick withdrawals would begin as soon as possible.[30] The decision was the beginning of the guerrilla activities that soon would become the sole activity of the Boers.

The first success of the new strategy was not long in coming, and it became the pattern of other Boer activities. On March 30, two regiments of cavalry and two batteries of Horse Artillery were withdrawing from the Ladybrand area where they had discovered Boer elements concentrated in strength. The column reached the Modder River at Waterval Drift late in the evening, and crossed the river, establish-

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[29]Gerald French, ed., Some War Diaries, Addresses and Correspondence of Field Marshal the Right Honourable, the Earl of Ypres (London: Herbert Jenkins, Limited, 1937), pp. 16-17.

[30]U. S. War Department, Adjutant General's Office, "Extracts from the Reports of Captain Carl Reichmann, Seventeenth Infantry, on the Operations of the Boer Army," Reports on Military Operations in South Africa and China, 1901, p. 195.

ing a camp some 1,500 yards from the ford at Sanna's Post.[31]

The Boer general, Christian DeWet, decided to take advantage of the situation, and assembling 1,500 Boers and five Krupp field guns he made a forced march to a point approximately 1,200 yards south and west of the British camp. Once there, however, he found he had only 400 men and two guns available, since his remaining force had failed to cross the Modder River. DeWet deployed his reduced force along a creek that crossed the only road leading south away from the British camp to Bloemfontein.[32]

As dawn broke on March 31, the British column arose and entered the road proceeding south at a leisurely pace, baggage wagons and larger trek wagons leading the column. Notably, there were no outriders or forward security elements. DeWet confronted the wagons, rifle in hand, directing them to cross the creek where his soldiers took them in tow, parked them off the roadway and gathered up the drivers. Soon, however, the wagons became conjested at the crossing and a British officer rode forward to investigate. There he discovered DeWet and the Boers. He immediately turned his mount and departed at a gallop to warn the remainder of the column, only to be shot down by DeWet himself. Immediately the whole Boer line opened fire.[33]

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[31]U. S. War Department, Adjutant General's Office, "Extracts from the Reports of Captain S. L'H. Slocum, Eighth Cavalry, on the Operations of the British Army," Reports on Military Operations in South Africa and China, 1901, p. 57.

[32]U. S. War Department, Adjutant General's Office, "Extracts from the Reports of Captain Carl Reichmann, Seventeenth Infantry, on the Operations of the Boer Army," Reports on Military Operations in South Africa and China, 1901, pp. 199-200.

[33]Ibid., p. 201.

Fortunately for the British, closely following the wagons were the two Horse Artillery batteries, but the initial volleys from the Boers put five guns of the leading battery and two of the trailing out of action. The remaining guns disengaged and moved to the left and unlimbered. Turning their guns on the Boer artillery pieces first and then on the enemy riflemen, the partial battery kept the Boers at bay, allowing the remainder of the column to retire.[34] Courage notwithstanding, the lack of sufficient scouting and march security had caused another tragedy that could have been avoided. The apparent lackadaisical attitude cost the British in addition to seven 12-pounder field guns left at the scene of the melee, thirty killed, 129 wounded and 421 missing or captured.[35]

Sanna's Post was followed by other isolated successes at Wepner, where on April 4, a British column was encircled for twenty days before relief arrived, and at Karree Siding where a buildup of Boers threatened the British advance in northern Orange Free State. All the incidents did much to boost morale, but they had not assured success. The Boers had assumed an offensive of sorts, but lacking sufficient manpower to totally overwhelm a British column, their activities were never decisive. Moreover, Roberts took immediate action in response to the increased hostility. On April 9, he declared martial law, and promised "extreme penalties" for those Boers discovered participating

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[34]U. S. War Department, Adjutant General's Office, "Extracts from the Reports of Captain S. L'H. Slocum, Eighth Cavalry, on the Operations of the British Army," Reports on Military Operations in South Africa and China, 1901, p. 58. "The action of these gunners was magnificent. In the face of a bitter fire at short range they stood by their pieces until of the five gun groups there was only ten men and one officer left unwounded. Then with five horses left and manual haulage, they dragged the guns out of action."

[35]Amery, Vol. VII, App. III, p. 24.

in the new trouble.[36]

Meanwhile, Roberts' army continued to grow, as he prepared to move on the second leg of the British journey into the Boer homeland. His maneuver forces had increased to four infantry divisions, numbering 24,000 men, a fourth brigade pushed the cavalry division to 5,000 men, and the mounted infantry became division size by an increase to 9,300 men. The artillery was increased and redistributed to support the maneuver elements. Each cavalry brigade had one Horse Artillery battery, or twenty-four guns for the division. The mounted infantry division was alloted two Horse Artillery batteries, or twelve guns. The infantry divisions each had three Field Artillery batteries, eighteen guns. A Corps Artillery was created, and it was composed of two batteries of Horse Artillery and three batteries of 5-inch howitzers, or thirty guns. Additionally, four 4.7-inch and four 12-pounder naval guns were present, along with four 6-inch railway mounted naval guns. Finally, waiting at Cape Town for dispatch to the front were four 9.45-inch siege guns, manufactured by Skoda of Pilsen, Bohemia. In all 150 guns were available with four yet to arrive.[37]

On May 1, Roberts began a general advance toward Kroonstad, building roads, repairing railroad bridges and distributing security forces to guard the vital supply lines as they progressed. In the far west a Mafeking relief column and the 10th division advanced along the DeAar-

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[36]U. S. War Department, Adjutant General's Office, "Extracts from the Reports of Captain S. L'H. Slocum, Eighth Cavalry, on Operations of the British Army," Reports of Military Operations in South Africa and China, 1901, p. 60.

[37]Ibid., pp. 60-61.

Mafeking railroad. All along the front resistance was very limited.[38] On May 17, Mafeking was relieved, and Londoners danced in the streets, cheering the gallant garrison and its pugnacious commander, Colonel Robert S. S. Baden-Powell. On May 21, Roberts halted his advance just short of the Vaal River for four days. There he resupplied his column, and allowed the Mafeking garrison to repair after their relief.

Beginning his advance again, lead elements crossed the Vaal River on May 24, and five days later they reached the outskirts of Johannesburg. Negotiations for its occupation took two days, and on May 31, the British entered the city. Again Roberts halted to prepare for the last advance to Pretoria. On June 2, in anticipation that he would have to lay siege to the Transvaal capital, Roberts received two 9.45-inch siege guns, and the four 6-inch rail mounted naval guns were brought forward to the railhead. Wisely, however, the Boers did not subject their capital to the tortures of the big guns, and after a brief skirmish on the outskirts of the city on June 4, the British entered the city the following morning. Roberts and his army marched through the streets of Pretoria, which were lined by cheering British prisoners who had released themselves after the Boers had departed during the night. Clearly, protracted combat was over in the western theater.[39]

However, Roberts' troubles were not over by any means. Christian

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[38]Ibid., p. 66. "The cavalry and mounted infantry would come up with the enemy, who had every appearance of being determined to stand, and would open a hot fire on the mounted men, but by the time the infantry and heavy guns came up and the flanking columns appeared, the Boers began their retreat, leaving as a rule, only a small force to hold the British, while their wagons and guns were safely retired."

[39]Ibid., pp. 75-78.

DeWet, soon to become the mastermind of Boer guerrilla tactics, had returned south of the Vaal River and attacked British supply lines around Bloemfontein and Helibron. Dispatching Kitchener to stabilize the situation and employing French's cavalry division and Methuen's 1st Division, along with columns from other divisions, Roberts saw June and July pass without snaring the wispy DeWet.[40]

The DeWet maneuvers were frustrating and distracting for Roberts, who desired to turn his attention to eastern Transvaal. In that area, Louis Botha and his main force were withdrawing as Buller advanced northward out of Natal into Transvaal. The advance of the British in the east had been slower than the western army, but considering the mountainous terrain Buller was required to negotiate he had made rapid advances. With the fall of Pretoria the advance increased, and by late June, Buller had crossed the lower Vaal River and established his headquarters at Standerton. On June 30, he dispatched a cavalry column and fifteen guns from his headquarters along the Durban-Johannesburg railroad to Heidelberg in an effort to contact Roberts' army. After a five day march and several isolated skirmishes the column arrived at its destination, and the two armies were united.[41]

Roberts began a tactical advance eastward toward Botha on July 19. Employing the successful tactics of wide flanking movements on apparent strong points, the British advanced rapidly and the Boers withdrew offering little resistance. On July 29, French, having returned from the DeWet hunt, entered Middleburg, situated nearly mid-way between the

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[40]Cecil DeSausmarez, "Lord Methuen and the 1st Division, SAFF," Proceedings of the Royal Artillery Institution, LX (1933), pp. 30-31.

[41]The Times (August 6, 1900), p. 13.

ends of the Deloga Bay-Pretoria railroad. A week later Buller's left flank advancing northward closed on Middelburg as well, and the British tightened the cordon on the Boers.[42]

The Boers sought to delay Buller from advancing further and they began attacking his supply lines in the south, but by August 23, Buller had established his headquarters at Carolina, and had continued his movement northward. Three days later, Roberts was twenty-five miles east of Middelburg. Elements of Bullers army occupied Belfast, and French was in the vicinity of Lydenburg north of the railroad.[43]

The Boers were literally being forced out of the country, east into the Portuguese territory bordering Transvaal. Resistance was becoming more determined, however, as the British neared the Boer headquarters at Machadodorp. The strongest position at Bergendal fell within the purview of Buller's forces. Situated at the base of two high kopjes that commanded the terrain, it appeared that the British were going to have a difficult fight.[44]

Buller ordered all his guns to open fire at 1000 hours on August 27, and they complied with rapidity.[45] For the Boers defending the town it was a terrifying experience as guns from three directions began a mercilous shelling. Unable to locate the British guns the Boers could not effectively return fire, although a Long Tom fired an occassional round. To the Boers it was "the spectacle of modern war with

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[42]John P. Wisser, "The Second Boer War," Journal of the United States Artillery, XV (1901), pp. 31-32.

[43]Ibid., p. 154.

[44]Ibid.

[45]The Times (August 30, 1900), p. 3.

smokeless powder." Their enemy remained hidden, and undoubtedly they felt the frustration and terror that the British had witnessed at Colenso. For the defenders of Bergendal on that day the battle was only the "tremendous roar of artillery and bursting shells, and not a human being was in sight anywhere." The Boers were simply outnumbered and outgunned, and at 1400 hours they were compelled to withdraw. The British quickly stormed the town and occupied it with very minor casualties.[46]

For the Boers and the British, Bergendal was the last major engagement of the protracted war. In the evening after the defeat the Boers moved their headquarters out of Machadodorp, and the next morning advanced elements of Buller's army entered the town, hot on the trail of the retreating and badly beaten Boers.[47] The following day, the retreating burghers were at Nooitgedacht, where 2,000 British prisoners were held. Unable to quarter them any longer, the Boers decided to release the enlisted captives, sending the officers to Barberton.[48]

The government in exile decided to join the guerrilla elements north of Pretoria, but the President, Paul Kruger, was too ill for the punishing trip that would be made. It was decided to turn the

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[46] Ibid.; U. S. War Department, Adjutant General's Office, "Extracts from the Reports of Captain Carl Reichmann, Seventeenth Infantry, on the Operations of the Boer Army," Reports on Military Operations in South Africa and China, 1901, pp. 235-236.

[47] The Times (August 30, 1900), p. 3.

[48] U. S. War Department, Adjutant General's Office, "Extracts from the Reports of Captain Carl Reichmann, Seventeenth Infantry, on the Operations of the Boer Army," Reports on Military Operations in South Africa and China, 1901, p. 238.

reins of government over to Schalk Burgher, the Vice President, and send Kruger east to the safety of Lourenco Marques in the Portuguese territory. By September 10, guerrilla war was all that remained for the Boers.[49]

Under the guidance of Christian DeWet, the Boers striking at camps and installations throughout the countryside occupied the time and efforts of the British Army until May, 1902. Unfortunately, the new guerrilla tactics held no hope of decisive victory, but the marauding bands of Boer riders did their best to create as much difficulty as possible. There were hundreds of fights, pitched battles, melees and brief skirmishes, and each side had its share of success and failure. In the end, the massive manpower and money of England was too much for the Boers to overcome and they reluctantly agreed to peace on May 31, 1902.

For the British, combating the Boer guerrilla bands was a frustrating and hazardous task. To cope with the numerous bands of mounted burghers, the British divided their forces into small mounted columns. Crisscrossing the countryside in varied directions, the British columns attempted to engage the Boers in some decisive manner. However, even for the British, a clear cut victory continued to evade them, and on occasion they suffered tragic losses. An example of such a loss occurred on December 13, 1900.

On that date a British column numbering 1,200 men and nine guns was encamped near a farm nestled at the base of the Magaliesberg Hills, some forty miles west of Pretoria. Secure in the thought that their

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[49]Ibid., pp. 238-239.

infantry elements in the hills were well prepared for any Boer attack, the British had spent a peaceful night resting from a long trek across the veldt. The Boers, however, quickly burst the dreamy scene early in the morning by first attacking the west side of the camp, and then overwhelming the British infantry in the hills. Soon the whole camp was under fire from the heights, and the artillery, backed against the hills and not positioned to defend the camp, were compelled to withdraw along with the other elements of the column.[50]

The fight raged well into the afternoon as the Boers progressively advanced on the camp and the British gradually gave way to their numerical advantage. Finally, the British assumed a defensive posture on a hillock about 3,000 yards from the original camp and the Boers ceased their advance, apparently unwilling to accept the punishment of assaulting an entrenched defensive position. The British took advantage of the opportunity to retreat from the area, and leaving their four 12-pounder field guns and a small escort element to fight a precarious rear guard action, the remainder of the column withdrew from the area. Late in the evening, the rear guard rejoined the retreating column and by the next morning the British were twenty-three miles from the scene of the tragedy.[51] Poor local security and poor deployment of forces had cost the British dearly, and the retreating column had been diminished by nearly half its number, losing eighty-eight killed, 172 wounded and 342 missing or captured.[52]

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[50]Inglefield, pp. 511-512.

[51]Ibid., pp. 513-517.

[52]Amery, Vol. 7, App. III, p. 24.

The Boers were not infallible either, and they suffered setbacks as well. On December 14, a British column surprised 400 Boers encamped in the Thabanchu Mountains. Later on January 29, 1901 French managed to engage a Boer column estimated at 2,000 men at Boschmans Kop. Employing the usual flanking maneuver in conjunction with a heavy bombardment by his five artillery pieces, French caused the Boer position to become untenable. Rather than suffer encirclement and bombardment, the Boers beat a hasty retreat. Unfortunately, French's maneuver failed to intercept the retreating Boers and the British were left with the position and no decisive engagement.[53]

For the Royal Regiment the guerrilla war brought about diminishing participation in the conflict. In late 1900, the Royal Horse and Royal Field Artillery batters were split into two and four gun subdivisions. They along with either a 5-inch howitzer or one large caliber oxen drawn heavy gun joined the British mounted columns chasing the Boers. By 1901, however, the presence of field guns was demanded less and less, as the British began adopting series of fortresses or blockhouses on commanding terrain in an effort to control the movements of the Boers. The Boers had also begun abandoning their own artillery pieces and large wagons, thereby affording them more speed in their movement. Finally Kitchener turned to his Royal Horse and Royal Field Artillery and converted them into mounted rifles. The gunners exchanged their field guns for rifles, and joined the columns of mounted riflers chasing and coralling the Boers.[54]

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[53]French, pp. 58-59.

[54]J. F. I. H. Doyle, "Our Mounted Rifles," Proceedings of the Royal Artillery Institution, XXIX (1903), p. 340.

The Boer War, like any war, was filled with hundreds of engagements, but those that have been covered vividly illustrated that the Royal Regiment had epitomized the fundamental necessity of adaptability during the protracted and guerrilla phases of the war. Mobility, diversity and flexibility had clearly been demonstrated.

At Paardeberg, mobility had trapped and ended the war for Piet Cronje. Even though the bombardment of the laager could have been more efficiently conducted, the variety of weapons available to the commander illustrated a willingness on the part of the Regiment to comply with any demand placed on it.

Buller's activities in relief of Ladysmith had vividly portrayed not only the efficient employment of a variety of weapons, but also a greater understanding of the capabilities of the arm. The ability of the artillery to maintain the pace with the rapid advance of Roberts' army in the punishing march to Pretoria was surpassed only by the infantry, who had to walk the entire distance.

The Royal Regiment displayed a diversity of weapons, particularly heavy guns, during the second phase of the war, and they were in continued use even during the guerrilla war. Dismantling siege guns and coastal artillery pieces, the Regiment placed them on improvised mountings that gave them sufficient mobility to join the mobile army and become an integral part of the success that followed.

For the gunners themselves, their courage was once again unsurpassed, as exemplified by their conduct at the Sanna's Post tragedy. Courage, diversity, mobility and adaptability were the hallmarks of the Royal Regiment, and it was only fitting that at the end of the war the gunners found themselves functioning as mounted infantry as well,

thereby completing the circle of adaptability. By some standards the Regiment was the "best branch of the combatant service."[55] To the Boers the Regiment indicated the losses at Paardeberg, Abraham's Kraal, Pieters Hill and finally Bergendal. In each engagement, two of which were the decisive battles in both theaters of the war, and in many others too numerous to mention, the Royal Regiment's guns had played not only a decisive but a dominant part in the Boer defeats.

With the war degenerating into a guerrilla conflict and its ultimate end in 1902, the Royal Regiment and the British Army as a whole began drawing conclusions from the experience. The lessons taught on the veldt and in the kopjes of South Africa required assimilation and application to the future. The impact of smokeless powder, camouflage, reconnaissance and long range guns had to be brought into focus along with other experiences from other wars, and decisions concerning employment, weaponry and tactics had to be made.

Certain conclusions were already explicit. Obviously, engagement ranges were only limited by observation distances and weapon capabilities. The employment of camouflage and weapons using smokless powder not only restricted observation, but also deceived the enemy and created confusion. Cover protected personnel and weapons so they might fight another day. The consistent failure of Boer artillery projectiles to detonate had saved many British lives, but additionally for the British, it pointed to the necessity of obtaining dependable fuses and projectiles, as well as improving range capabilities of artillery

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[55]U. S. War Department, Adjutant General's Office, "Extracts from the Reports of Captain S. L'H. Slocum, Eighth Cavalry, on Operations of the British Army," Reports of Military Operations in South Africa and China, 1901, p. 80.

weapons. Moreover, the war had demonstrated the complexities of future wars. Communication, supply and the various types of support weapons used by the artillery were demonstrative of the complications future wars might hold. Clearly, for the Royal Regiment, long range high-powered guns, high trajectory shorter ranged howitzers, and rapid fire high velocity field guns had all made a place for themselves on the battlefield of the twentieth century. Subsequently, it fell to the Regiment to assess their experiences in South Africa, and apply them to the future needs of the British Army.

CHAPTER V

CONCLUSIONS

Historically, most wars that have been fought yielded some broad lessons for application to future confrontations. The Boer War was no different in that aspect, and the feature of overwhelming importance and which made the greatest impression upon warfare as a whole, was smokless powder. Although it had been in existence for a number of years, its full impact was not totally appreciated until the Boer War vividly demonstrated its importance. As a tool of warfare, smokeless powder complicated the battlefield by creating on the one hand an environment which was both psychologically and physically insecure. It, coupled with camouflage and long range magazine fed rifles added new dimension to surprise as a principle of successful combat. Conversely, it demanded a more thorough reconnaissance to locate an enemy and eliminate the possibility of being surprised. Secondarily, smokeless powder employed with adequate cover protected soldiers and therefore contributed to extending survival rates on the battlefield and boosting morale and confidence. Clearly, the influence of smokeless powder was lasting, and it has since affected warfare in the twentieth century markedly. For the Royal Regiment of Artillery immediately after the war, the broad impact of smokeless powder did not go unnoticed, but with it came additional and more specific considerations that resulted in modification in employment ideas, as well as new thoughts regarding

armament for the Regiment.

As has often been the case after a war some suggestions were too quickly formulated and failed to carry with them the broader applications of the lessons of the Boer War. Most of these took the Boer War as an example of the future of warfare. However, as has been pointed out in this study, the terrain and climatic conditions in South Africa were unique and not generally the type of conditions that would prevail in a European conflict.

Among those to voice early opinions concerning the war was Winston S. Churchill, who obtained a rather folk-hero image for his derring-do as a war correspondent in South Africa. Addressing the Royal United Service Institution in April, 1901, Churchill pointed out that the Boers had employed guns singly or in groups of two or three with some efficiency. He went further to suggest that the Royal Regiment should adopt a similar tactic by creating what he termed "artillery snipers." He visualized their employment as independent of batteries, functioning with advanced cavalry for the purpose of harassing the enemy in his rear areas.[1] Obviously, the scope of this suggestion was too narrow to be considered an end in itself. Churchill, however, recognized the complications created by the adoption of widely dispersed elements on the battlefield in South Africa. He appreciated the difficulties in concentration of fire that this kind of warfare generated. Noting the impractical and time consuming work required to move a number of weapons so all their fires could be brought on a specific

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[1]Winston S. Churchill, "Some Impressions of the War in South Africa," The Royal United Service Institution Journal, XLV (1901), p. 839.

target, he suggested a system of colored shells to mark particular targets for all guns to engage. It was a novel idea, because heliograph communication in South Africa had proved itself less than adequate as a means of communication. Churchill himself understood the novelty of his suggestions, and describing artillerymen as "grave people," he conceded that they had not received his suggestions with "exuberant enthusiasm."[2]

Another voice of suggestion was found in the person of B. F. S. Baden-Powell, an officer in the Scots Guards during the Boer War and brother of the hero of Mafeking. He pointed out among other things, that the uniqueness of the South African theater was conducive to the use of long range guns. Specifically regarding artillery, he described its effects on the one hand as having "considerable morale influence," but contradicted himself by noting that too much was made of that aspect, calling the effect "disappointing."[3] The only advantage found in artillery, according to Baden-Powell, was the fact that it had longer ranges than individual weapons. However, Baden-Powell did see into the future of warfare to some degree, and favored engagement by indirect fire with howitzers as a probable important asset, allowing the infantry to advance under an umbrella of fire.[4]

Long range fire in the Boer War, clearly made a considerable

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[2]Ibid., 840-841. The colored shell technique to mark targets has been adopted since Churchill spoke. It met with some approval in World War II, Korea and either it or white phosphorous shell has been used extensively in Vietnam as a target marker.

[3]B. F. S. Baden-Powell, War in Practice: Some Tactical and other Lessons of the Campaign in South Africa, 1899-1902 (London: Iskister and Company, Limited, 1903), pp. 51, 251.

[4]Ibid., pp. 253-255.

impression upon most military people; however, long range fire was not new. Siege guns had always been longer ranged than field guns, but the idea that long range guns on a mobile battlefield could be effective had not been appreciated. The Royal Commission appointed to investigate the war preparations of the British Army clearly pointed to this fact by noting, "it does not appear to have occurred to anyone before the war that the Boers could or would, bring the heavy fortress guns....into action in the field."[5] As illustrated, this new feature caused the British to deploy in South Africa a number of various long range guns mounted on improvised carriages. With various sorts of draught to pull the big guns, including oxen, horses and mules, the big guns were capable of keeping pace with the fast moving army.[6]

The presence of the big guns with their adequate mobility brought about questions concerning organization of the Royal Regiment. For example, totally ignoring the presence of howitzers and their influence on the battlefield, General J. Wolfe Murray advocated horse artillery with light weapons to accompany mounted forces and field artillery with heavy guns to accompany the slower moving infantry force.[7] General Murray was not alone in his idea, however. General Ian Hamilton expressed the view that artillery in the Boer War was un-

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[5]Great Britain, Reports of His Majesty's Commissioners, p. 91.

[6]Owen James, "The Elswick Battery in South Africa," The Royal United Service Institution Journal, XLV (1901), pp. 993-997. The 6-inch Elswick naval guns were sighted to 8,000 yards and employing oxen, mules and horses as the situation dictated, they spent most of their time with French's cavalry, which was noted for its speed and mobility. The Elswick guns probably epitomized mobility of big guns, since they always kept pace with French.

[7]J. Wolfe Murray, "Do We Require Field Artillery?" Proceedings of the Royal Artillery Institution, XXIX (1903), pp. 217-219.

necessarily mobile and advocated a light gun for the Horse Artillery and position artillery to accompany the infantry.[8]

Another idea advocated grouping light guns, howitzers and heavy guns in a single unit, thereby giving the battery commander a variety of weapons to engage any target.[9] Less compulsive thinkers were at hand, however, and in the end their ideas prevailed.

There was no doubt that long range field guns were an absolute necessity, but the importance of close responsive fire support did not go unnoticed. In 1903, General G. H. Marshall, who had been general officer commanding the artillery in South Africa, advised that the 15-pounder field gun was going to be replaced by a proposed 18-pounder quick-firing gun, with a shrapnel range of 6,000 yards, and the 12-pounder Horse Artillery gun was going to be replaced by a 12½-pounder quick-firing gun that possessed equal range and shrapnel effect. Moreover, Marshall recommended that guns employed in the future be confined to four types: "a field artillery gun, a horse artillery gun, a field artillery howitzer and a heavy battery gun."[10] This suggestion not only gave variety of response to the commander, but simplified supply and logistical requirements.[11]

Following this line of thought, the Royal Regiment retained Horse and Field Artillery, and in the summer of 1903, formed a brigade-

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[8]Great Britain, Reports of His Majesty's Commissioners, p. 92.

[9]W. P. Saunders, "Do We Require Field Artillery?" Proceedings of the Royal Artillery Institution, XXIX (1903), pp. 355-356.

[10]Great Britain, Reports of His Majesty's Commissioners, p. 92-93.

[11]Ibid., p. 89. The British employed three calibers of howitzer and seven types of field and heavy guns during the South African War, and supplying ammunition was a herculean task.

division of heavy artillery to train and operate with the mobile army.[12] The weapon chosen for the new heavy artillery was the 4.7 inch gun towed by draught horses four abrest.[13]

Additionally, by 1904 the army decided to maintain in peacetime an experimental army corps under a specific commander, General John French, who would train the unit in peace and command it in war.[14] This decision complemented the decision made in 1901 by the Royal Regiment to retain the brigade-division organization in peacetime as well as war.[15] Thus, mythical organizations were eliminated and employment was facilitated. The brigade-division commander became a member of the division commander's staff as well as functioning as the overall commander and coordinator of the division's artillery assets.

The question of armament after the Boer War was never absolutely answered, and prevails even today. It was apparent that the 15-pounder and 12-pounder would eventually give way to quick-firing guns, just as muzzle loaders had given way to breech loaders. However, there were many weapons to choose from, and each one had some important feature to recommend its adoption.

Krupp and Ehrhardt manufactured field weapons with a low muzzle velocity which reduced wear, while the French Army's gun had a higher muzzle velocity, and was heavier than the other two guns.[16] Krupp

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[12] Inglefield, p. 521.

[13] Callwell and Headlam, p. 67.

[14] French, p. 101.

[15] Callwell and Headlam, pp. 27-28.

[16] H. S. Bethell, "The Field Gun of 1904," Proceedings of the Royal Artillery Institution, XXX (1904), pp. 397-398.

weapons had proven themselves more stable at the Swiss gun trials than any other weapons tested.[17] All new weapons were equipped with elevating gears or screws to aid in obtaining the maximum range, and all were outfitted with varying types of buffers and recoil mechanisms.[18]

Ammunition and fuses were equally a concern. Shrapnel had proven effective within the range limits of its fuse and shell velocity, but lyddite had demonstrated less satisfactory results. Newer developments in shrapnel shell had been made, however. Ehrhardt, for instance, had devised a driving charge rather than a bursting charge for the shell. The charge imparted 350 foot/seconds velocity to the shrapnel bullets beyond that which the flight velocity of the projectile contributed to the round. High explosive ammunition, giving better results than lyddite was sought after, but continued to baffle weapon technicians for many years to come.[19] Fuses for artillery shells were being developed that were both dependable, a trait British fuses consistently displayed in the war, as well as possessing a longer time increment, a notable shortcoming of the British shrapnel fuse.[20]

Tactics of employment for all artillery in the Boer War were affected as well, but not as markedly as one would expect. The tactical dictum concerning the artillery duel had not been disproved, primarily because the Boers had refused to engage in a duel. The Boer

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[17] Ibid., p. 398.

[18] Ibid., p. 400.

[19] Ibid., pp. 410-411.

[20] Ibid., p. 411.

War did prove, however, that the effect of the artillery preparation had been overrated unless, as had been demonstrated at Pieters Hill and Monte Cristo, the bombardment was conducted in conjunction with a well-coordinated attack.

More vividly apparent to the gunners was the importance of invisibility and cover. Obviously staying under cover and remaining invisible demanded the employment of guns in an indirect method of engagement. This involved many other aspects of firing that complicated the science of gunnery. With longer ranges available in field guns and taking advantage of cover, the requirement for observation parties arose and with it a problem of communications.[21]

Along with longer ranges, observation parties, communication requirements, and dispersion, fire control systems such as mathematical tables and slide rules to bring all available fires upon a given target at a given time was required.[22]

The flash and colorful tradition of coming into close contact with the enemy continued to appeal to some.[23] Others, however, saw a different employment and discounted the effectiveness of close contact suggesting that,

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[21] A. H. Gordon, "Has the Experience of the War in South Africa Shown that any Change is Necessary in the System of Field Artillery Fire Tactics (in the Attack as Well as in the Defense) in European Warfare," Proceedings of the Royal Artillery Institution, XXIX (1903), p. 126.

[22] Ibid., pp. 124-125.

[23] J. P. DuCane, "Some Problems Presented by the Introduction of Q. F. Guns for Field Artillery," Proceedings of the Royal Artillery Institution, XXX (1904), p. 253, "While positions behind the crest will in future be forced on Artillery in open stages of the fight it is inevitable that the force of circumstances will equally surely bring the guns into the open as the fight progresses."

> our infantry are shrewd enough to know that shells screaming over their heads are a more practical support than the sound of batteries struggling with half wrecked teams to get a few guns into action close to them, at any unknown range and only to draw the whole of the enemy's fire at one spot.[24]

The Royal Regiment considered other things such as shields for guns, weight of guns, wheel size for easier movement, horses for draught, optical equipment to aid reconnaissance and target acquisition, the future of the automobile in warfare, and the importance of invisibility of their own guns. All these and numerous other issues were carefully examined in the immediate aftermath of the Boer War. None were immediately settled, but the experience of the Boer War had caused the Regiment and the British Army to begin changing to meet the demands of the future. Newer, more realistic training was developed, and newer weapons were proposed. A command structure on a permanent basis was established. In the final analysis the Regiment began looking forward, preparing itself for the next war that undoubtedly would come. The Boer War had shoved the Regiment out of the past, and it had happened none too soon. The lessons of the Boer War and those of the Russo-Japanese War (1904-1905) laid the foundation of the Army and Regiment in World War I. It proved to be gigantic compared to the Boer War, and the demands placed on the Regiment were proportionately increased, with the lessons of World War I being applied to prepared for yet another confrontation.

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[24]Gordon, p. 134.

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